Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.



U. S. Department of Agriculture

DAFFODILS

LILIES

IRIS

Wholesale Only

Oregon Bulb Farms

GRESHAM, OREGON



DEALERS' PRICES 1950

DAFFODILS
LILIES
IRIS

WHOLESALE ONLY

Oregon Bulb Farms
GRESHAM, OREGON

from OREGON BULB FARMS, Gresham, Oregon, 1950

REPORT TO OUR CUSTOMERS

Our ambition to grow the best and finest bulbs of daffodils, iris and lilies, is, as real life is to most men, a perpetual compromise between the ideal and the possible. Our ideal is to grow bulbs second to none, of such high quality that good results with them must be inevitable. We try to ship them at the right time, to pack them in such a manner that they reach our customers in perfect condition. We should like to have large stocks of all the better varieties so that we can fill all orders in full and yet grow no more than the demand warrants.

Being at the mercy of the weather, subject to the deficiencies of soils and the vagaries of human errors, we realize that we often fall short of the aims we have set ourselves. Yet, we continually strive for perfection, for improvement in the quality of the bulbs, for further refinement and worthwhile innovation in our variety selection and in our services. Whatever small measure of success we have achieved leaves us conscious of the many imperfections and the shortcomings yet to be corrected.

Some success we have had and we acknowledge it gratefully. We are also duly thankful for the support that you, our friends and customers, have given us. Without that backing and without the impressive orders for our bulbs we could not have financed the hybridizing ventures to which we have devoted such a major part of our income and efforts. Much of this work will never show a material profit. Yet its aesthetic rewards and the challenge that our initial successes give us, spur all of us on to greater effort and to an even more intensive application to the task before us.

While your material recognition, your orders and recommendations to other buyers, are extremely valuaable to us, we are no less grateful to all those of our friends who have extended a helping hand in advising and counseling us in matters of variety selection, promotion and publicity. It is no easy task to select from among the hundreds of avenues of approach in breeding new plants, the few roads we can afford to travel, the dozen or so that will give the greatest promise of success. It is even more difficult to select from among the thousands of magnificent new seedlings those clones or strains that will meet with popular approval. We deeply appreciate both your advice and criticism.

Your visits to our farms and breeding grounds are more than a friendly gesture. To us your presence means that you take an active interest in our work and that you will give us the benefit of your experience in the selection of new flowers, that you will let us profit from your taste and preferences. It means even more than that, for we feel that the seedsman cannot sell his clients, cannot promote real enthusiasm among the gardeners, if he himself is not imbued with a deeply felt and genuine love of new plants. To know of this material is not enough, even though this may also be the best compromise between the ideal and the possible. If you can come and visit, then by all means do so. See the new plants actually growing. For in this case seeing is believing.

During the months of June, July and August we can show you new lilies, during April and early May the new daffodils and during the latter part of May the bulbous iris. As our listing in the back of this book will show, the daffodils comprise the best of Dutch, English and American varieties. We are furthermore testing a number of Australian and New Zealand novelties, which, to say the least, should be of great interest to all American daffodil fanciers. We also have a number of new seedlings of our own—daffodils which we look upon with pride and with considerable satisfaction. They may never become the "King Alfreds" of the future. In fact, we should not wish them to be, for their appeal is not for the many. They come in new tones of pink, in odd "reversed" shades of lemon-yellow and in tones of copper and buff-orange. There are also some pure whites and good self-colored yellow trumpets and many little daffodils for the rock-garden. Although many of them have no commercial possibilities, they are, nevertheless, very pretty and I know you will enjoy seeing them.

The iris cover the well-known range of "de Graaff" novelties and of the standard varieties. Naturally enough, it is a matter of pride to us that these fine iris which have found universal acceptance, are the product of my family's life-long endeavor to produce better bulbs. To raise a number of iris, such as Yellow Queen, White Excelsior, Wedgwood and many others and, during one's lifetime, to see them not only popularly accepted, but raised by the hundreds of millions so that in iris season they adorn every flowershop in the northern hemisphere is a great achievement. It is a source of pleasure for me to be able to mention that my father, W. H. de Graaff not only originated all these iris and many others, but that he first conceived the idea of the crosses that made these hybrids possible, that he carried

out his experiments and through his rigid selection and outstanding cultural practices was able to bring them to a successful conclusion—their entry upon the world market and their acceptance by the trade and the public.

It is this example, no less than my grandfather's work with the famous daffodils that he developed, that led us to try our hand at lily raising. From a mere pastime and hobby of twenty years ago it has now developed until it has become the mainstay of our business and the fifty or more acres that we have planted to lilies this fall comprise none but the finest new hybrids and superior, selected strains of the species. It is in viewing these new lilies especially that we can ask you to share with us the achievements that your orders and hence your support have made possible. To see, as we can show you, more than seven acres of the Cascade Strain of L. candidum in full flower is an unforgettable sight. Purer white, better in form, more free-flowering than any L. candidum you have seen, these new lilies are also diseaseresistant and more vigorous in growth.

Much has been said and written about our new L. tigrinum-umbellatum hybrids. Their number was legion, but through most drastic scoring we have reduced them to less than twenty clones, most of which have been named and are offered in this catalog. The remainder, those hundreds of magnificently colored hybrids, combining the very best qualities of their parents and adding new refinement in color and form, we have mixed and are offering as Mid-Century Hybrids. These lilies and their ancestors have been photographed by LIFE magazine and may possibly be printed in that magazine next spring. They were also illustrated and described in the Saturday Evening Post of October 15th, 1949.

Our new *L. elegans-umbellatum* hybrids in many new colors and with real hybrid vigor are being offered this year not only in three outstanding clones, but also as a mixture. The name we coined for them, "Rainbow Hybrids," while by no means original, describes them well. Aurelian Hybrids, those fine intermediate forms between the best trumpet lilies and *L. Henryi*, will be found described in the body of this catalog. Ample room has been given to the Fiesta and Olympic Hybrids, to the beautiful Golden Chalice and Bellingham Hybrids and to the latest addition to our lily family, the Hollywood Hybrids. Special attention has been given to the best true species lilies, all of them raised by us from seed taken from selected plants, pollinated by the best forms only.

As in previous years, we obtained during 1949 a great

deal of publicity for our bulbs. The "Saturday Evening Post," which reported on our activities with lilies in an article written by Frank J. Taylor, led the field by its able presentation of the subject and the magnificent color illustrations. The "Flower Grower" printed two of our articles on lilies, the one covering the Madonna lily in all its aspects, the other devoted to the newer hybrids. "Sunset Magazine," the "Home Garden," "Horticulture" and many other magazines and publications are devoting more and more space to the better varieties of bulbous plants. Since we specialize in the production of this material, the publication of these articles not only helps us, but is also most useful to our dealers.

The very considerable response that we receive after each article is published is overwhelming proof, if such were still needed, that this form of publicity is of the greatest value to all dealers. All inquiries that we receive as a result of these articles are referred to the nearest dealers. Our business is, and will always be, exclusively wholesale.

On the other hand, while we do not sell directly to the public, we are always glad to receive your customers and to assist them in making a selection for their gardens. We aim to maintain a small, but attractive, flower show in one of our buildings and the large fields of lilies and daffodils have induced many an amateur gardener to purchase considerable numbers of high-priced bulbs from their regular dealer or mail-order house. Our large scale breeding projects have been of particular interest to many visitors to our farms. In almost endless variety of form and color, acre upon acre of new lilies invariably create new enthusiasm among the amateur gardeners. If we could only show these lilies in the major gardening centers of our country, our sales problem and yours would be considerably lighter.

On the next pages will be found a further report on lilies, some special points in connection with our sales terms and conditions and prices that will prevail for the 1950 season. In setting the prices we have been governed only by our desire to quote the lowest possible prices consistent with the best quality. We realize only too well that the increased cost of living, the higher costs of shipping and the increased merchandising costs to all of us will make sales resistance all the greater. We therefore feel that we must cooperate with our dealers and make the best possible prices during these difficult years, so that a sufficient turnover can be maintained in quality bulbs.

Our own answer to all the problems of higher costs has been increased production of the best varieties. We have eliminated hundreds of varieties of daffodils, lilies and, in a smaller degree, iris, so that we could give our full attention to the outstanding lots. In doing this we have strengthened our mixtures so that they now represent a value that cannot be equalled by any other grower. At the same time, this reduction in the number of lots has enabled us to streamline our operations, so that our new grading equipment, as well as our new cultivators and tractors, can be used to full advantage. We believe that we are now as close to "in line" production of bulbs as is compatible with quality material. All savings

effected by our higher efficiency have found expression in lower prices and in better values in the present list.

In conclusion. we want to thank you most sincerely for your patronage and help during the past year. Since we realize that it is only through you that we can function, we value your cooperation and friendship all the more. If possible, the writer will call on you some time next spring to discuss your needs.

Sincerely yours,

Gresham, Oregon January, 1950 JAN DE GRAAFF, President OREGON BULB FARMS

Join The North American Lily Society

The North American Lily Society was organized in July 1947, "to promote interest in the genus Lilium, scientific research in its breeding and culture, standardization of its varietal names, the dissemination of information concerning the above and to promote such other purposes as may advance the culture of lilies."

All persons interested in lilies are cordially invited to become members of the Society. Annual membership is \$3.00.

Advantages of membership:

- 1. Association with others keenly interested in the culture of lilies. The membership lists in the year-books will provide many contacts throughout North America.
- 2. Opportunity to receive the annual yearbooks and to contribute articles for publication.
- 3. Attendance at Field Days that will be held in different parts of the country where displays of lilies may be seen. Field Days may be organized by the Society or by regional groups.
- Access to expert advice on problems of lily culture. Inquiries addressed to the Secretary will be forwarded to those best qualified to answer them.

Applications for membership in the Society, accompanied by remittance of dues, should be sent to the Treasurer, Dr. R. N. Stewart, Carters Lane, Riverdale, Maryland.

PLEASE NOTE THESE POINTS

CATALOG

A completely new classification of daffodils has gone into effect this year and we have, therefore, re-written and re-arranged our offerings to bring them in line with the official classification. Many new descriptions have been made and our listing of daffodils, iris and lilies has been expanded to cover the greater number of varieties that we ourselves grow.

CONTAINERS

After years of experimentation with new types of containers we have come to the conclusion that our well-known tray crates give the bulbs the best possible protection. We shall use them exclusively on all long-distance shipments. We still have a number of our fibreboard and wood containers on hand and shall use them for local shipments until the supply is exhausted.

DISCARDS

Every year, during the flowering season, we score all our daffodils. Again at harvest time we check on the quantity and quality of the bulbs produced, and all varieties that have scored low are then discarded. This year the varieties DINGO, DINKIE, EDWINA, FORTUNE'S PRIDE, LORD WELL-INGTON, MACMAHON, MRS. WALTER BREWSTER, ST. IVES, SNOW KING, TRESERVE, TULLUS HOSTILIUS, WARWICK and WHITE WEDGWOOD have thus been discarded, together with an undetermined number of varieties which have been sent to us for trial. Our customers are requested to take note of these discards.

RETAIL

PRICES

Many of our customers ask us to suggest retail prices on all our bulbs. We believe that for all except the very cheapest bulbs a mark-up of two and a half times our list price is sufficient to cover all contingencies and leave a fair margin of profit. High-priced items should be sold for double our price. Low-priced items can stand a price of three times cost.

PATENTS

TRADEMARKS

The lilies which we have patented and the strains for which we have obtained a trademarked name are so designated on this list. Our customers are requested to use these designations in their catalogs and lists, since it protects them as much as our firm against unfair competition based on cheaper substitutes and untrue stock. Our lilies are constantly re-selected and none is sold to other growers or dealers for resale to the trade without our express license. To date no such licenses have been given out by us.

DISCONTINUED

Our entire stocks of: TULIPS, CROCUS, HYACINTHS, SCILLA, TRITELEYA, MUSCARI, SNOWDROPS, COLCHICUM,, IXIOLIRION, OXALIS, IRIS RETICULATA, etc.

EXCLUSIVELY

WHOLESALE

We cater exclusively to the legitimate seed and catalog trade and purposely do not send our catalogs or price lists to any other persons or firms. We do not sell to florists, gardeners or to anyone else who does not buy bulbs for re-sale purposes. All inquiries and orders from such sources are turned over to our dealers.

HOLLAND

BULBS

In the past we have imported large quantities of Holland bulbs, as a special service, for our customers. Due to the expansion of our activities in the production and sale of lilies, new daffodils and iris, we find that we can serve our customers better by confining our sales and promotional efforts only to the material produced by us in Oregon. We shall be delighted to assist in the choice of Dutch bulbs and in the selection of the best sources of supply abroad. We shall, however, no longer import Holland bulbs for others.

ORDER EARLY

We have now been in business in Oregon for twenty-one years and not once in all this time have we had enough bulbs of the choicer varieties to fill orders. We are expanding our cultures as fast as is commensurate with the maintenance of quality. We have no ambitions to be the biggest growers nor can we expand fast enough to keep up with the demand. We, therefore, urge all our friends and good customers to order early.

PRICES

Our prices are based on two very closely related factors: the rate of increase of our varieties and the quantities available. We make our own prices and set our own grades, regardless of what other growers may do. Our prices are the same to all customers under the same conditions. Considering our unconditional guarantees as to quality, true-to-name delivery, early shipment of fully acclimated, healthy stock, our prices are very reasonable. Remember that you do not pay for containers, shippers' disbursements, etc. Our price plus inland freight is all you pay.

SERVICE

We endeavor to give our customers the best possible service. All inquiries are answered the same day we receive them. All orders are promptly acknowledged. When an order has been accepted, if it is humanly possible to make delivery, we do so, regardless of any difficulty. We have thousands of photographs available and a wealth of data pertaining to the industry and the variety selection. It is yours for the asking.

QUALITY

Our bulbs are grown on a fertile, sandy loam which locally is called "shot clay". This land, which was of fine quality to begin with, has patiently been improved by covercropping and fertilizing, so that it now ranks among the finest in our state. We believe that our bulbs are of the very highest quality and we spare no expense to maintain virus-free, healthy stocks. All stock shipped out is fumigated with methyl-bromide in order to eliminate insect pests and all planting stocks are hot-water treated every other year to prevent possible infestations of the narcissus nematode. Consequently, our bulbs are sound and firm and exhibit a most unusual keeping quality which makes them ideal for store and over-the-counter trade.

RESERVATIONS

We are glad to book orders for stock to be reserved for shipment at a seasonable time. We require no deposit or impose no obligation on you to take the stock, but only assume, of course, that your reservation order is placed in good faith and that you will order from us such part of stock reserved as you may actually require in filling your orders. Such reservation orders hold good until July 1st and all modifications should be in our hands by then.

SMALL ORDERS

Growing hundreds of varieties of daffodils, iris and lilies, many of them exclusively ours, it is obvious that we must stand ready to fill your orders for this material in even the smallest quantities. For many gardeners the collecting of this often rare material is a hobby and we are always happy to assist them in it. We ourselves do not accept retail orders, but we shall be glad to fill them for our bona-fide customers and usually make no extra charge for this service. If, however, a customer should wish us to fill a large number of such small orders, then we reserve the right to make an extra charge for containers and special service.

TERMS AND CONDITIONS

Not less than ten bulbs of any variety will be supplied at the prices quoted in this list and no wholesale orders will be accepted from parties not actually engaged in the seed and nursery trade.

Boxed collections are packed in cases as listed and no broken cases can be supplied.

While we seldom fail to complete accepted orders, we reserve the right to omit any part of an order where unexpected or unavoidable shortages occur.

We do not substitute unless we are expressly instructed to do so.

With our Packaged Collections we reserve the right to substitute equal or better varieties in any collection, in case an unexpected shortage of any variety occurs. Where such a substitution is made the label will be altered, if necessary, to show exact contents.

All orders shipped at purchaser's expense and risk. We exercise every possible precaution to pack our bulbs safely and to protect them against damage in transit. However we cannot offer any guarantee to that effect.

No extra charges are made for delivery to carrier, nor is any charge made for containers or crates. Charges for freight, forwarding and delivery will be collected when the bulbs arrive. These charges are net, not subject to any discount. All shipments bear a Certificate of Inspection issued by our Oregon State Department of Agriculture. It is distinctly understood that our customers must assume all risk in regard to the entomological requirements of their respective states.

Complaints and claims about the quality supplied cannot be entertained unless made immediately upon receipt of the bulbs. No warranty is given, express or implied and we will not be in any way responsible for the results of planting or forcing of any bulbs supplied by us.

Prices of all our offers are quoted net, subject to market fluctuations and stocks being unsold upon receipt of orders. Verbal agreements will not be considered. All orders are accepted subject to satisfactory crops. By placing orders, buyers are considered to agree with our terms, even where they may differ from those usually made.

If at the time of shipment purchasers have not yet settled their previous year's accounts, or in the case of unknown customers that cannot supply sufficiently good references or in the case of unsatisfactory information, we shall be compelled to cancel any orders placed with us.

GUARANTEE

Guarantee: We guarantee all varieties to be true to name and description. While we exercise the greatest care to have all stock true to name and hold ourselves prepared to replace, on proper proof, all stock that may prove untrue, it is mutually agreed between the purchaser and the Oregon Bulb Farms that we shall not at any time be held responsible for a greater amount than the original purchase price of the stock.

LILY DESCRIPTIONS

REPORT - 1950

and PRICES

Oregon Bulb Farms

GRESHAM, OREGON

REPORT ON LILIES

The 1949 growing season was, in many respects, the best we have encountered in some twenty years of lily production. Not only was the weather ideal during the flowering season, but it was also all we could have wished for during the entire growing season and the harvest. While many new hybrids flowered, this year there were no startling developments nor did we, indeed, expect any. The seedlings which will flower in 1950 should show some remarkable advances, if the few flowers that appeared during the past summer are any indication. Our hybridizing program now covers many new lines of breeding. The quantities of seed that we have raised during the past year are truly astounding. If we can raise all this seed to its flowering stage, then some magnificent seedlings must certainly occur.

It serves, of course, no purpose to speak about these seedlings as yet unseen. I mention them only to you as an inducement to visit our farms during the flowering season. Why not be among the first to see these new lilies as they come into flower? That there will be some of great merit is entirely beyond doubt. During the 1949 season, for instance, for the second time we had a fine batch of new golden yellow lilies, the result of crosses between hybrid *L. tigrinum* and *L. amabile luteum*. The strong-growing, pure golden forms of the latter, which we have been able to segregate from among thousands of seedlings, crossed with the best of our Tiger lily hybrids, have produced new varieties of surpassing beauty. Many of them are very rapid growers and it will not be long before we can market them.

Other achievements that are a definite reality are L. Henryi hybrids of pale but pure canary yellow coloring and enormous size. We flowered more than 500 of such lilies during the 1949 summer. Our lines of breeding in this strain are well established and we can make more of them "to order". A few of the L. Henryi hybrids of the Sunburst type showed a definite two-toned effect. Several of them were of a delicate rose-pink coloring and others came in rich ivory-white color. Some of them were small, others large, some faded and others improved in coloring in the hot sun. Altogether this Sunburst strain of ours holds promise of being one of the most popular garden plants of the future.

Other L. Henryi hybrids of great merit are the series of orange-throated trumpet or semi-trumpet lilies that we call our Heart's Desire strain. Numerous lilies of this type flowered for the first time during the past summer and the strain is now so well established that we can produce them in quantity. Our aim is to intensify the orange coloring, to keep the trumpets rather short and to have all the plants of good size with five to seven feet stems and numerous, well-placed flowers. That

many of these *Heart's Desire* types have bulbils in the axils of the leaves, undoubtedly a characteristic inherited from a distant *L. Sargentiae* ancestor, is an additional, most desirable trait.

The Golden Clarion strain, our third type of L. Henryi hybrids, is withdrawn from our current offerings. We are making great strides with this strain, but the transition from our old collection, which leaned heavily on ivory and palest yellow shades, to the new lilies, which are truly yellow and golden in color, is too great. We can now see that, compared to what it can still become, the old Golden Clarion strain is insignificant. We therefore have concentrated on the raising of more of the deeper colored lilies and should have ample stock available in the near future.

Among the true trumpet lilies we have made several great advances. More and more of our work attains perspective and the various types that we have set as our ideals are now emerging in ever increasing quantities. Working with these trumpet lilies makes us realize with regret that not more scientific work has been done to identify the species that are involved in these hybrid strains of ours. We feel almost certain that L. regale did not play a role in their production. Rather, lilies like our "Olympic Hybrids" are the result of crossing L. Sargentiae, a good form of L. leucanthum var. centifolium and L. myriophyllum var. superbum with perhaps several other true species. Some forms which emerge indicate the possibility that L. Brownii and a particularly beautiful form of it must have been involved. Be that as it may, the Olympic Hybrids that flowered for the first time in 1949 were more beautiful than any we have seen in the past.

A field of more than seven acres, the upper field of what we call the Woodcock farm, was planted exclusively to Olympic Hybrid seedlings, all of them the result of hand-pollinated crosses. It is from this field that we expect to make the bulk of our deliveries for the 1950 season. No stock older than that which first flowered in 1948 is being retained, except for some especially selected strains and clones. Among the latter are our Green Mountain strain and the unbelievably beautiful Green Dragon lilies. Quite well illustrated in our color poster, the latter seem to be an entirely new "break" or mutation. The Pink Selections continue to delight every visitor to our farms. Under Pacific Coast conditions they are of a rich and sparkling fuschia-pink, deeply veined and suffused throughout the entire trumpet. The description adopted by some of our customers, "the outside of the graceful trumpet has shades of purple to pink which show faintly through the white", is a gross understatement from our Pacific Coast point of view. There is no doubt, however, that in all regions where high night temperatures occur these lilies bleach out in the bud stage and do not show the pink coloring to any such extent as is true here. This puts us in a curious quandary for with us these lilies are definitely pink and fully as good as the fine color reproduction on our lily poster. Visitors to our farms clamor for them and again in 1949 we sold at list price every bulb we could possibly make available. These "pinks" have flowered well and in good color along the Eastern Seaboard, in Oregon and Washington and in the cooler regions of California. We are constantly working with this strain in an attempt to get deeper, non-fading coloring and the last group of seedlings to flower, several hundreds of them in our last summer's new stock, was indeed a deeper pink shade. How they will stand up in other climates remains to be seen. They will not go out to the trade until the fall of 1950.

The Mid-Century Hybrids, the result of hybridization involving L. tigrinum, L. umbellatum, L. aurantiacum, L. dauricum and L. concolor, to name but the outstanding, true ancestors of this strain of ours, will make their first formal bow to the public in 1950. Last year, prompted by, a desire to get at least a few of them distributed so that they could be shown and discussed, we sold several thousands of them and did not have enough to fill but a small part of the orders. This year we have slightly larger stocks but again they will be very definitely far short of the demand.

CARE AND STORAGE OF BULBS

Although we do all we possibly can to insure that our lilies arrive at your warehouse as fresh as they were when they were dug, it is even more important that they receive proper handling through the bulb selling season. In some regions this season extends from October through January. Most varieties are easily held in ordinary, cool storage without loss of vigor. This does not mean, however, that full cases can be displayed in a warm store, where the customers are permitted to pick out their own bulbs-or to examine several to find the ones they wish to purchase. Not only do such exposed bulbs become easily dried out, but roots are destroyed and scales break off. Even though you may feel that your customers prefer to see displayed bulbs in the store, we suggest that only a very few be exposed and that the balance of the case be stored in a cool (45°-55° Fahrenheit) room. The packing material should never be allowed to dry out and, if this occurs, the bulbs should be repacked in moist peatmoss, sphagnum, sawdust or even clean sand. Bulbs held under these conditions should remain plump and fresh until they begin to

sprout late in the winter. Surplus bulbs that remain late in the winter may be potted in clay pots or gallon cans. They will then form roots and some varieties will begin to sprout almost immediately. Several dealers have used this method of saving surplus bulbs and holding them until the spring at which time they can sell them to good advantage.

Handling and care of the lily bulbs in storage does not end the responsibility of the dealer. After bulbs are purchased across your counter or through the mail by your customers, they still must be adequately packed to prevent drying out and crushing. Even though the bulbs are bought in a period of "gardening enthusiasm", they quite often do not find their way into the ground for some time. While this is not the fault of the retailer, certainly he is always the man who is blamed if poor performance or even failure of the lilies is the result. It is, therefore, only logical to protect yourself and your customer by packaging the bulbs well at the time they are sold.

In brief, lily bulbs are best considered and handled in a manner that you would employ for living plants. They are not handled in the same manner as the socalled dry bulbs, such as tulips, daffodils, hyacinths, etc., etc. The dealer must never lose an opportunity to impress this upon his customers. We foresee a future for the American-grown lily when in volume and popularity it will be in a position comparable to tulips, daffodils, gladioli and dahlias. True species will gradually disappear from the lists and more vigorous, reliable hybrids will replace them. Even today we are in a position, if we so desire, to introduce twenty named varieties a year for the next five years. This means that, as the number of varieties continues to increase and as these varieties receive publicity, your customers will expect you to handle them. This future can never materialize if the customer does not receive bulbs which are fresh, plump and alive. They must remain in that condition by dint of proper handling by the grower and the retailer until they are planted.

SPRING OR FALL DELIVERY

We are not, as yet, prepared to hold any large quantities of lilies for spring delivery. Wherever possible, fall planting is to be recommended. We harvest our stocks early enough to enable us to get them into your hands while the fall bulb sales are still at their height. Even though this means some loss of size, we feel that from the standpoint of performance for your customers, it is much preferable to spring delivery. We are willing to make every effort on our part to complete all deliveries

LILY DESCRIPTIONS and PRICES

early in October and, with few exceptions, this delivery date will allow you several weeks of fall planting weather in your particular locality. Even though light frosts have already occurred, bulbs planted in the fall will immediately make a fall root growth, which does much to insure a natural growth and flowering the following season. No matter how they are handled, bulbs held until spring are of inferior quality. They have been denied the opportunity to make the necessary fall root growth and, very often when planted in the spring, will immediately make top growth and flower without making new, permanent roots.

Spring sales of lily bulbs became a general practice

when imported bulbs began to arrive in this country in January with the result that there was no choice as to planting time. Now that we are able to deliver American-grown, healthy lilies in October, we strongly advise you to make every effort to dispose of the lilies in the fall. This means passing on this information to your customers who have been in the habit of planting lilies in the spring. A few varieties, such as L. Centifolium hybrids, keep especially well in storage and, should the trade demand spring delivery in any appreciable quantity, we shall arrange to make this service available to our customers. For the present we feel that good performance is more important than some additional sales.

LILY DESCRIPTIONS and PRICES

L. amabile—Brilliant grenadine-red flowers, nicely spotted with black, carried on strong, slender, three-foot stems. Because of its very free flowering habit, few bulbs are needed to make a brilliant dash of color in the garden. Best suited as a bold accent group in the border, L amabile does well in full sun and will stand considerable drought. The intense color does not fade in direct sunlight.

The bulbs are white, high crowned and composed of relatively large scales. Plant five inches deep in light porous soils, shallower in clay and adobe. Stem roots are sparse or entirely lacking; basal roots heavy and contractile. Underground stem bulblets are formed in profusion, especially on the smaller stems.

per 1000, 3-4", \$200.00; 4-5", \$240.00; 5-6", \$300.00

L. amabile luteum—One of the loveliest of the yellow flowered Lilies, this rare from is identical with the type, except in color, and requires the same culture. The healthy seedlings we offer are from parent plants selected for outstanding color, size and placement of the flowers. Flowering a few days later than L. amabile, the bright yellow flowers combine with almost any companion plant and are exceptionally beautiful when seen against a background of evergreen foliage. Bulbs are similar to the type species but run somewhat smaller in size.

per 1000, 3-4", \$320.00; 4-5", \$400.00; 5-6", \$500.00

L. auratum platyphyllum—The stock of this fine species as offered by us in our current price list is raised from seed furnished by various growers to which we have added some stocks of bulbs that have been collected

for us in the mountains of Japan. All of our Auratum lilies have flowered on our nurseries and have been most rigidly selected so that only the best types are retained in our collection. This stock is as nearly free from virus as any lilies of this type will ever be. We recommend it without hesitation. Bulbs should be planted from five to seven inches deep. This is the Golden-Rayed Lily of Japan, with great, fragrant, waxy-white bowl-shaped, horizontal blooms, golden-streaked and often crimson-spotted. Flowers in August and September. Needs full sun and a rich, well-drained soil.

per 1000, 6-7", \$500.00; 7-8", \$600.00; 8-9", \$800.00

L. "Aurelian Hybrids"-The most important of all of the new races of hybrids, this group at present is the subject of large scale hybridizing by lily specialists. The seedlings are the results of crosses between L. Henryi, many of the white trumpet lilies such as the "Olympic Hybrids," L. Sargentiae and L. sulfureum in all combinations. Although they are sometimes designated as Henryi Hybrids, many of the plants more closely resemble the other parents. The variation is genetically complete in form and color, since the seedlings vary from straight Henryi types to almost straight trumpet lilies. The middle group, or those which show the characteristics of both parents, is the basic plant of this new strain. The flowers of this middle group vary in shape from huge bowl shaped white or cream flowers with yellow or apricot centers to widely flaring or slightly reflexed flowers usually colored yellow, yellow-orange and light apricot. Thus far the general habit and placement of flowers more closely resembles L. Henryi and the culture is the same as for that species. The colors fade slightly in full sunlight and light shade should be provided when the first buds begin to open. Plant the bulbs six inches deep in a rich soil that is well drained and slightly on the heavy side. Fertile to the pollen of many types, these plants are particularly valuable to hybridizers. We are able to offer a limited quantity of different types as follows:

(1) "Sunburst"®

This group is made up of the flowers which most closely resemble L. Henryi in shape. They are much larger and less reflexed than those of L. Henryi and the colors include white, cream yellow and orange. The flowers are of unusual texture and substance and are suitable for either garden or cut flower work.

Random size—each, \$1.50

(2) "Heart's Desire"®

This selection is almost intermediate in shape between the trumpet form and the L. Henryi shape. They are essentially shallow, widely-flared and bowl-shaped in shades of white, cream and yellow-orange. Many of them have a bright orange throat, shading to cream yellow at tips of the petals.

Large Bulbs—each, \$1.50 Flowering size—each, \$1.00

(3) "Golden Clarion" ®—None to offer for 1950 This type resembles the trumpet lily in all respects except in color and texture of the flowers. The shading of the petals varies from clear butter yellow down to cream yellow. These forms are extremely rare and scarce at present, however they are a magnificent addition to the trumpet lily group and we predict that these, along with the new pink trumpets, will become, in the very near future, as popular and as widely planted as are the Olympic Hybrids today.

L. "Bellingham Hybrids"—A strain of lilies which has more than lived up to hopes invested in the original crosses, since this group is by far the most desirable of all the lilies for cut flower purposes and informal or woodland planting. Ideally spaced on tall, slender straight stems, the flowers are particularly long lasting. The pyramidal flower heads bearing up to 20 flowers may be cut as the first buds open and will remain fresh until the entire spike is in bloom. The buds are long and narrow and reveal the attractive spotting of the petals long before opening. The color range is complete from clear yellow through the yellow-oranges to the bright orange-reds with scarlet tipped petals. Most of the flowers are intensely spotted with brown or reddish brown.

Named Bellingham Hybrids in honor of the late Dr. David C. Griffiths, who did a great deal of work on lilies at the Bellingham, Washington, experiment station of the U.S.D.A. Many of his hybrids of American native lilies have been used in the production of our strain, plus additional species and seedlings of our own.

The bulbs are typical of the West Coast native lilies, being composed of small white jointed scales which turn a pink color on exposure to light. The bulb is of the rhizomatous type and new crowns are formed annually along the scale covered rhizomes. Ideal for partial or light shade they prefer a cool, light soil. Since the majority of the basal roots are annual the bulb can be expected to give good results the first year, but it is at its best when left undisturbed since the bulbs divide and branch rapidly to form large clumps.

Plant 5 inches deep in ordinary soils. A winter mulch is recommended in the colder sections to protect the bulbs against alternate freezing and thawing. Stem roots and bulblets are not formed by this group and propagation is from scales and division. Smaller sized bulbs are mostly single crowned while the larger sizes often have two or more and will produce a like number of flowering stems.

per 1000, 5-6", \$220.00; 6-7", \$260.00

L. candidum "Cascade Strain"—One of the prides of our lily stocks is this new strain we have been slowly developing for the past several years. It is unusual in that the strain sets seed freely and possesses a vigor far surpassing the best of the imported stocks. The foundation of these hybrids was an extensive collection of all forms of the Madonna Lily available to the trade, including several unusual types obtained from a French priest. Careful selection and pollination has finally produced a race of the Madonna Lily with tall straight stems and large flowers of unusual texture and perfect form. Greatly resistant to botrytis, these seedlings are really the first improvement of our times on L. candidum, the oldest lily in cultivation. Weeding out the less desirable forms has resulted in a group exhibiting a minimum of variation in flowering date and length of stem. Propagation of the best clones will enable us to supply absolutely uniform varieties of the most desirable types in the very near future.

L. candidum is one of the few bulbs which requires very shallow planting and the top of the bulb should not be over an inch below the surface of the ground. It prospers in a heavier soil than do most lilies, but the soil must be well drained. Since the bulbs make a fall growth and are dormant for only a few weeks in August, early planting is necessary, preferably not later than September 15th. The Madonna lily suffers no set-back in transplanting, provided it is planted early enough in the fall to make its normal autumn growth. Consequently, the larger sizes will produce exhibition spikes the first year. It increases rapidly by natural division and will soon form a large clump which must be divided and

Lily Descriptions and Prices (Continued)

re-set if large flowers are desired. August delivery. List in spring catalog.

per 1000, 6-7", \$200.00; 7-8", \$240.00; 8-9", \$300.00

L. candidum—"White Elf"—A unique clone that we have selected out of some fifty thousand new seedling Candidums of the "Cascade Strain". White Elf is a true dwarf in every respect. The entire stem of a fully grown bulb measures not more than twenty-four inches. The flowers are very beautifully proportioned, the foliage is of a deep green, healthy coloring. The bulb is also small and apparently various factors in this curious plant have combined to keep it of miniature stature. It is for this reason an ideal lily for the rock garden, for borders and even more so for informal flower arrangements.

each, \$2.00

L. centifolium "Olympic Hybrids"—A major project of our breeding program for the past several years, we are especially proud to offer this modern strain of trumpet lilies to gardening America. Side by side, field tests have definitely proven them to be the finest strain of hardy garden lilies available.

Their breeding history includes such varieties and species as L. leucanthum, var. centifolium, Sargentiae, Brownii and L. myriophyllum var. superbum. Careful selection of the finest and choicest plants from these crosses has resulted in the present Olympic strain which is characterized by its extreme vigor and size, form, coloring and good placement of flowers. There is a pleasing variation among the individual plants of the strain and all types, from the stylized typical trumpet shaped flowers to the more unusual forms such as the widely opened bowl shaped flowers with petals slightly twisted and ruffled. The color range of all the parent plants is present in the Olympic Hybrids in addition to new combinations and types which include creamy trumpets, soft fuchsia pink and the popular cool, icy green. The exteriors of the petals are delicately shaded with light greenish brown or soft wine tints and in some instances are a pure glistening white. July flowering, they bloom later than L. regale and their period of flowering extends from three weeks to a month. They do equally well in full sun or partial shade. The dominant colors do not fade appreciably in full sun, but, as with other plants, the flowers are at their best in very light shade and, when grown for show purposes, the plants should be given light shade as soon as the buds lengthen and begin to show color.

The bulbs form strong stem roots in addition to the very extensive basal root system which provides good insurance against drouth. Plant the bulbs 5 to 6 inches deep in well drained soil and they can then be left undisturbed for several years.

per 1000, 6-7", \$100.00; 7-8", \$140.00; 8-9", \$180.00; 9-12", \$300.00

L. centifolium "Special Select"-For the more discriminating gardener we are now able to offer a limited number of specially selected bulbs of the Olympic Hybrids. These plants are tagged in the fields during the flowering season and represent the choicest and finest as selected from acres of trumpet lilies. Every plant is of exhibition quality and is of outstanding character in all respects. Any one of these tagged plants might well be propagated as a clone, since each one represents the pick of several thousand flowering seedlings. Quantities are extremely limited and all reservations must be received before July 1st. The general types available are the large formal waxy white trumpets, characteristic of the trumpet family, of unusual substance and vigor and exhibiting ideal placement, with either white or light pink exteriors—the wide flaring open bowl shaped type, usually with brownish or light greenish exteriors to the petals and the very large flowered irregular form which has recently shown up in our seedling plots possessing longer petals which are often slightly twisted or ruffled, giving the flower a most graceful, informal shape.

In random sizes only, \$0.60 each

L. centifolium "Pink Selections"—A strain which has had our closest attention for several years. Although in habit and in culture the plants are similar to the Olympic Hybrids, the flowers are shaded pink. This color extends over the inner surface as well as the outer surface of the petals and is indescribably beautiful. This offering is bound to become one of the most popular of garden lilies as soon as sufficient stocks are available. Our experience with these lilies, however, has shown that while they are a true and definite fuchsia-pink with us and other growers in cool, moist climates, they do not show this color when grown in regions where warm nights prevail during the flowering season. Apparently the heat bleaches the colors even before the buds open. We are intensifying our breeding program and hope to ship out only the very darkest forms. All lilies of this type shipped by us are tagged in the field by one or two of our most experienced men. These tagged plants are harvested by hand at shipping time and come in random sizes only. In random sizes only, \$2.40 each

L. centifolium — "White Selections" — From among the hundreds of thousands of trumpet lilies on our farms we select a few hundred that have pure white flowers. We can do this only during the flowering period

and must have our orders in hand before July first. These lilies will be pure white and of finest form only. Most of them show a greenish rib or stripe on the reverse of each petal.

In random sizes only, \$3.00

L. cernuum—A most attractive little lily from Korea and Manchuria. Looking in form and habit like *L. pumilum*, it has small, nodding, violet-lilac flowers with darker lilac tinted pollen. It is a rare and beautiful lily and we are very fortunate to be able to offer it from Oregongrown stocks. *per 1000*, 3-4", \$500.00; 4-5", \$600.00

L. chalcedonicum—A glorious lacquer-red lily from Greece. It is the seed parent of *L. testaceum* and was called some three hundred years ago the "Scarlet Martagon of Constantinople", but also, in many English villages, "Turn again Gentlemen", for its vivid red color made all travelers look around once more. Flowers in July with from two to five flowers on mature plants. We have found this species of easy culture, but definitely subject to virus diseases. We recommend it therefore only for hybridizing purposes where isolation can be given to it. *per 1000*, 5-6", \$800.00; 6-7", \$1000.00

L. concolor—One of our favorite members of the lily family, this little flower is one of the best. In late spring and early summer the cheerful, bright red star-shaped flowers open on thin wiry stems. Concolor is of the easiest culture and asks only for a warm, sunny spot in well drained soil. Plant it in groups in the herbaceous border where its gaily colored flowers will show to best advantage. Also put a few bulbs in the cutting garden as it is one of the best of the lilies for cut flower purposes. An excellent market grower's flower, it will become more popular as American-grown supplies become more plentiful. All our bulbs are from seedling stock and exhibit the vigor characteristic of healthy seedlings.

The solid bulbs are sound, creamy white in color turning pink on exposure to light. Plant 3 to 4 inches deep in groups of not less than five. Height 2½ to 4 feet. per 1000, 3-4", \$200.00; 4-5", \$300.00

L. Davidii—variety "Maxwill"—This lily is offered in the trade under a wide variety of names. Holland growers now offer a strain under the name of L. Willmottiae "improved" which is nothing but a gathering of Maxwill type lilies. We now have discontinued growing any of the variously named types of L. Willmottiae and are confining our production to a very superior form of L. Davidii, which, in the opinion of all visitors to our farms and trial grounds, is the best of the lot. Our strain of L. Davidii has tall, straight stems and does not wander underground, to emerge in adjoining flower beds or in the middle of your garden paths. On stems

that are from four to seven feet tall, it bears from twenty to thirty large bright orange flowers, gracefully spaced on long and slender pedicels. Trouble-free and resistant to all pests and diseases, this lily promises to be one of the most popular garden plants. Plant the bulbs from five to six inches deep where it will receive full sun. per 1000, 4-5", \$160.00; 5-6", \$200.00; 6-7", \$300.00

L. "Fiesta Hybrids®"—As cheerful and gaily colored as the name implies, this new race of seedlings has neatly reflexed flowers, nicely spaced on thin wiry stems. Resulting from crosses between L. Davidii (L. Willmottiae) and related types, they are one of the brightest patches of color in our lily fields during July. Extremely uniform as to flowering time and habit, the pleasing variations in color and form of flower enhance their beauty and usefulness. This is one of the few crosses which has produced no inferior types. The colors range from bright yellow through orange to a beautiful dark rich red. The latter color is new to this type of lily. Most of the flowers are of the typical recurved turks-cap shape and many of the plants have blossoms facing outward or somewhat upward with the petals only slightly recurved. A sun-loving group, plant them 5 to 6 inches deep where they will get plenty of direct sunlight. Propagation is most rapid from the numerous underground stem bulblets which may be separated from the old stem in the fall and replanted near the mother bulb. Resistant to mosiac, this group has proven a wonderful addition to the garden lilies. Excellent cut flowers, the stems are easy to handle and arrange and the colors are particularly attractive indoors. Award of Merit, Massachusetts Horticultural Society 1946.

per 1000, 4-5", \$400.00; 5-6", \$500.00

L. formosanum—tall, late strain—The latest flowering of all the popular lilies, this white trumpet type is particularly desirable for gardening in moderate climates. The plants are often in flower as late as December here on the Pacific Coast. Of easiest culture, this lily should be in every garden. Our strain is tall and free flowering and has been grown from selected plants for several generations.

The bulbs are very small, but should be planted 5 to 6 inches deep since Formosanum produces very heavy stem roots. Full sun or partial shade suits it well and for better flower production some water should be provided during the hottest part of the summer.

per 1000, 3-4", \$75.00; 4-5", \$100.00; 5-6", \$125.00; 6-7", \$150.00

L. "Golden Chalice Hybrids®"—This is another instance where we have chosen to introduce an entire

Lily Descriptions and Prices (Continued)

strain of seedlings which have shown marked improvement over the parent plants rather than segregate a few individuals and propagate them for eventual naming and introduction. After testing the best known varieties of the Dauricum-Umbellatum-Elegans types from Holland, England and the Orient, the possibilities for improvement in color and shape of the flowers appealed to us. Our main objective of clearer, brighter colors with the elimination of the muddy oranges and orange-reds from the group has largely been realized in the Golden Chalice Hybrids. After roguing out the less desirable forms the range of colors of the remainder of the population varies from clear lemon yellow through the rich warm shades of gold and apricot-orange. As with all our other strains of seedlings the Golden Chalice Hybrids exhibit exceptional vigor. The bulbs are uniformly white, clean and sound. Plant the bulbs in a warm, sunny location where they will get full sun, at least 6 inches deep, since the stem roots are heavy and numerous underground stem bulblets are formed. Shallow planting will reduce the increase from stem bulblets and tend to cause the bulb to split up in several different crowns. Extremely drought resistant, these hybrids are ideally suited for that warm, dry corner of the border where they will flourish and flower freely with a minimum of care. June flowering, height 2½ to 4 feet. In random sizes only, per 1000, \$500.00

L. "Green Mountain Hybrids"-This group resulted from seed obtained from the collection of Dr. L. Horsford Abel. It was originally a mixture of his finest selected white trumpets, including such forms as: L. princeps "George C. Creelman," L. princeps "Shelburne Hybrid," L. "Crow's Hybrids" and L. centifolium. Re-selection of these in an effort to fix the character of unusual size of flower, combined with a green coloring of the throat and the brown shaded exterior of the petals has resulted in an impressive group of trumpet lilies. Quite distinct in shape and color from our Olympic hybrids, they are definitely a superior group of plants, particularly valuable for exhibition and specimen planting as well as being a magnificent cut flower. They require the same cultural treatment as the Olympic Hybrids and are at their best when planted in very light shade, where their unusual coloring can be seen to their best advantage.

per 1000, 6-7", \$250.00; 7-8", \$400.00

L. "Green Dragon Strain"—These magnificent lilies occur but very rarely in our plantings of trumpet lily hybrids. It is our belief that they represent a reversion to a species lily that is, as yet, unknown to us. The trumpets are very short, and have very heavy, wax-like texture and substance. The colors tend towards green-

ish or chartreuse yellow with reddish-brown, broad, striping on the reverse. The pollen is either dark brown or orange. The plants grow as tall and as vigorously as any of our Olympic Hybrids. The inflorescence and habit are also identical with the Olympics, but the shape and color of the flowers is entirely different. The plants are extremely slow to propagate and are only found in small numbers. They do not come true from seed.

Random size only, each \$6.00

L. Hansonii—A golden-yellow lily from Japan, with reflexed, pendant flowers of great substance, it is still rare in home-grown quality and hence rather expensive at present. Its main value lies in the fact that it crosses readily with *L. martagon* types to produce beautifully colored and spotted garden lilies. It is one of the hardiest lilies known, with deep green, glossy foliage in numerous whorls around the stem. From five to ten large flowers per stem. It does best in partial shade.

each, \$1.00

L. Henryii—This grand lily from central China is now the center of attention in the lily world as the parent of the Aurelian hybrids. Yet, in its own right, it is a beautiful garden lily which should not be overlooked. The stems grow from five to eight feet tall, are of a purplish brown coloring and thickly covered with shining, dark green, pointed leaves. It flowers in late August for us with as many as twenty or more golden orange, recurved and pendant flowers. It is a stem-rooter and likes slight shade. Since the tall, wiry stems bend with the wind and rain this lily is at its best when supported by stakes or shrubbery.

per 1000, 5-6", \$400.00; 6-7", \$500.00; 7-8", \$600.00

HOLLYWOOD HYBRIDS-

This entirely new strain of hybrid lilies, which we offer this year for the first time as a mixture and in two named clones, is the result of inter-crossing the Preston Hybrids with our Mid-Century lilies. The Mid-Centuries, being the result of crosses between L. tigrinum and various upright lilies, are thus further modified by the introduction of L. Davidii blood. The result has been a race of star-shaped lilies, like giant L. concolor, on tall, wiry stems and in a variety of colors. Again, as in the Mid-Centuries we have pendant, outward-facing and upright flowers. For the present, however, we shall confine the strain to the upright flowering, star-shaped lilies. The mixture comes in many shades of yellow, orange and mahogany-red. All are magnificent garden lilies.

each, \$1.00

"Joan Evans"—Named after the popular young Hollywood star, is a broad-petaled, bright, golden-yellow upright lily. It is late flowering and therefore a particularly

fine addition to our garden lilies. Carrying as many as from six to nine flowers on a thin, wiry and tough stem, it stands from four to five feet tall. Magnificent cut and show flower but equally good in the herbaceous border. Flowers attractively spotted maroon.

each, \$3.00

"Roseanna McCoy"—A sister-seedling of Joan Evans, is a bright orange, upright flowering lily with from six to ten lovely star-shaped flowers per stem. The color is undoubtedly derived from *L. concolor* and this lily might well be described as a giant *Concolor* with hybrid vigor. Fine for cutting and for the border. *each*, \$5.00

L. longiflorum—variety "Croft"—A pure white, short-stemmed Easter lily which has been the subject of much wild speculation during the recent war years. It is a greenhouse and florist flower and has great merit for forcing in pots. It is not a garden lily.

per 1000, 6-7", \$150.00; 7-8", \$225.00; 8-9", \$300.00

L. longiflorum—variety "Estate"—A tall form of L. longiflorum, and for that reason better suited for garden use than the Croft. Neither variety is entirely hardy. Their pure white flowers can be very attractive in special settings. They are too formal and too short to fit in well in most gardens. per 1000, 6-7", \$200.00; 7-8", \$300.00

L. "Lillian Cummings"—One of the best of Miss Preston's introductions, this hybrid of L. Davidii and L. Elegans-Dauricum bears grenadine-red flowers on three to five foot stems. A most worth-while garden plant, it is vigorous and disease-free and of easy culture. Plant the bulbs four to six inches deep in either full sun or partial shade. This lily divides and increases rapidly and should be lifted and separated when the bulbs become crowded. Early July flowering.

per 1000, 4-5", \$300.00; 5-6", \$500.00

L. martagon album—The pure white form of the long cultivated Martagon lily that is so popular in Europe and England. The dainty waxy flowers are gracefully placed and form a symmetrical pyramid on 4-foot stems. One of the most permanent of all lilies, once it is happily settled it will increase from year to year, forming larger and finer spikes. Our seedlings have prospered extremely well and the bright yellow bulbs are sound and healthy. It should be planted not deeper than four inches in a well drained sunny location. Best grown among low evergreen shrubs, Martagon album is equally useful in the cottage garden or estate woodland.

per 1000, 5-6", \$500.00; 6-7", \$650.00

MID-CENTURY HYBRIDS—

Last year, for the first time, we offered a very limited number of these new lilies to the trade. The response was so overwhelming that we found ourselves oversold even before the normal sales season opened. When, in October, the Saturday Evening Post spotlighted these lilies and singled out our patented novelty "Enchantment" for a color portrait, we had to turn down literally hundreds of orders. This year, with only slightly larger stocks to draw upon, we expect to sell out again at an early date. Notwithstanding this fact we have decided not to raise our prices. We do not expect the firms who ordered too late last year to pay a higher price, nor do we think that new lilies should be sold at prices which are, in effect, prohibitive to all but a very few gardeners. Moreover, we want to avoid, in so far as that is in our power, any such wild speculation in these lilies as happened with the Croft lily. All these Mid-Century lilies propagate readily and they can be increased in number in many ways. It is our aim to get them known and used, not as high-priced rarities for only the few to enjoy but as popular garden lilies for all parts of our country.

The Mid-Century Hybrids are, as is probably wellknown by now, the result of a rather involved hybridization process that has included such popular lilies as L. tigrinum on the one side and hybrids between L. dauricum, L. concolor, L. aurantiacum and several others on the other side. Crossing and backcrossing these lilies and their offspring, we have evolved the strain which we introduce to the trade this year. From their parents these lilies have inherited the hardiness, the coloring and the resistance to disease that is to be found in at least some of them. The bulbil-bearing characteristic comes, for instance, not only from L. tigrinum but also from L. bulbiferum. The soft, pinkish-orange tones that some of these lilies display, must be ascribed to the influence of L. tigrinum. The mahogany shades and the rich reds of CAMPFIRE and FIREFLAME come directly from L. umbellatum.

Only one of these lilies, *Enchantment*, is patented (U.S. Plant Patent 862). It may not be grown commercially without our express consent. The others are not protected in this manner for we believe that the more widely these fine lilies are grown, the better the cause of all lilies will be served. Last year, in our 1949 catalog, we offered nine lilies of the Mid-Century group. This year we have added eight more, making seventeen in all. We know that this number is high and that, eventually, perhaps not more than a dozen varieties will emerge that will meet with public favor. On the other hand, it must be noted that we have in these lilies such

Lily Descriptions and Prices (Continued)

widely divergent types and colors that no parallel can be drawn between these hybrids and any other group of lilies, ever introduced. The colors range from palest straw-yellow to deepest maroon-red. The habit of these lilies varies from pendant, as in the Tiger lily, to large outward-facing flowers, never before seen, to enormous, vividly colored, upright lilies. They also vary in flowering time, in height and in their rate of increase. With all these variants, we feel that some twenty different named varieties are not too many.

The bulbs of all these lilies should be planted about four to six inches deep. They will thrive in any good, well-drained, porous garden soil, preferably in the full sun. They can be increased very easily from scales, underground bulblets, by bulbils that form in the axils of the leaves and by ordinary, natural division of the bulb. We repeat that our "Enchantment" is patented and that it may not be propagated commercially without special license.

Ten of our 1950 Mid-Century introductions have flowers that face outwards. All these lilies will, under certain conditions, produce bulbils in the axils of the leaves. They do not depend on this means of propagation, however, as they come quite readily from scales taken at flowering time or shortly after. The stems, in our nursery rows, are usually not over three feet tall. A small experimental planting in my garden of bulbs that had not been scaled, reached a height of four feet six inches and it is very well possible that these lilies, when full-grown, will be taller yet. We have selected the most contrasting colors and the widest variation in habit and flowering time for naming and cloning. The lilies we offer below were the outstanding ones in our trials.

"Apache"—A rich Indian-red lily with immense, outward-facing flowers. Earlier than Fireflame, which it resembles, it advances the flowering season of these fine new lilies by a week. Slightly and attractively spotted with maroon-black speckles.

each, \$3.00

"Fireflame"—Is a short, sturdy lily which may have exceptional value as a pot plant in the greenhouse of the commercial grower or amateur, as well as in the garden where it can be planted in the foreground of the herbaceous border. The color is a solid mahogany-red, slightly spotted with black or deep maroon. Planted in the full sun in our nursery it grew to a height of 25 inches from scaled bulbs. The very large flowers face out and have broad, heavily textured petals. As many as eight flowers to a head, all of them well spaced on good pedicels, the buds open over a period of several days.

each, \$1.50

"Goldfinch"—Outstanding golden-yellow lily with huge, outward-facing flowers, from three to five per stem. The beautifully spaced and proportioned head is borne on a deep brown stem with olive green, glossy foliage. A sensational novelty of great merit.

each, \$3.00

"Harlequin"—Unusual shade of salmon-buff, entirely new in lilies and particularly attractive. The large, outward-facing flowers are well spaced and look one squarely in the eye. The soft tones of this beautiful lily are seen at their best against a setting of glossy green foliage. Exquisite border plant but equally attractive as a show flower.

each, \$4.00

"Parade"—A rich yellow-orange colored lily. Down the center of each petal there is a stripe of burnished gold. Heavily spotted with minute black or maroon dots. The flowers which stand out horizontally have very wide petals and make a glorious show. Twelve to fifteen flowers per stem are no exception, yet all are well spaced and have plenty of room to open and to develop normally. The good, rich color sparkles in the sun so that "Parade" was a real favorite with all visitors to our farms.

each, \$2.50

"Serenade"—Later than the others, it has a good, clean and clear orange coloring. It stands only a little over two feet tall in our nursery which makes it an ideal plant for the herbaceous border and for pots. The fine proportions, the sturdy stems and the healthy, glossy foliage make this an unusually fine garden lily, impervious as it is to diseases and pests.

each, \$1.50

"Tangelo"—This curious name, derived from a fruit that is a hybrid between a Tangerine and an Orange, suggests the vivid orange coloring of this beautiful lily. Tangelo is medium early, has slightly star-shaped, outward facing flowers and scored high in many of our trials.

each, \$3.00

"Tango"—The lightest colored of all our introductions to date is of palest amber or deep parchment coloring. Large, beautifully formed flowers face the beholder squarely, the soft colors, resembling a warm, glowing desert sand, are neatly offset by small black spots towards the throat of the flower. The foliage is, as it should be in such a grand lily, of deepest green and glossy. Stems from two to three feet tall, fine pot plants and equally outstanding in the garden. A color never before seen in lilies.

each, \$3.00

"Vagabond"—Is of a distinct salmon-orange coloring, in itself a most unusual shade and all the more remarkable and conspicuous when combined, as in this instance, with enormous flowers that face out and with their brilliance light up the garden. In all our trials "Vagabond" received the highest scores. No description can do it justice nor do we expect that the color plates now in preparation will be able to show the unusual quality of this fine lily.

each, \$1.50

"Valencia"—Is the last of our outward-facing lilies to be introduced this year. It is a mid-season lily of fine soft orange to rich yellow coloring. We consider it of very fine habit, placement and form and have rated it very high during the four seasons we have been privileged to observe it. "Brilliant", "clear", "clean", "sparkling" are some of the adjectives noted down by us during the flowering season. The very large, rather flat flowers have a slight midrib of coppery gold. Quite a few spots of maroon dot the petals.

each, \$1.50

Seven of the 1950 introductions are upright lilies. These are true Tigrinum-Umbellatum hybrids. All of them will show bulbils in the axils of the leaves, if the flower or the buds are removed early in the season. "Enchantment" will have bulbils, even if allowed to flower normally. All of them flower with us around the first of July. Their blazing colors and their straight stiff stems made them stand out in our nurseries. Their radical departure in form, habit and coloring from anything that has been seen in lilies up to the time these novelties flowered was noticed by every visitor.

"Bolero"—Unusual shade of cinnamon-brown and mahogany. Tall, late-flowering upright with fine placement of the individual flowers. The petals are nicely dotted with small, maroon spots. Beautiful garden lily, it is the largest flowered lily among our upright introductions.

each, \$4.00

"Bonanza"—Is later than the others and of a clean orange-yellow coloring. The flowers are smooth and have a wonderful texture. The spotting is very slight and attractive. "Bonanza" was three feet high in our nursery planting in the full sun and in hard ground. It should be taller than that in the garden.

each, \$1.50

"Campfire"—Was the best of the upright red-colored lilies in our planting. The color can best be described as a rich, deep, fiery Indian red. It has a few spots on each petal, but since they are maroon-red, they are hardly noticeable. The petals are pointed and rather narrow, giving distinction to the plant which, in a nursery, is three feet high and probably much taller in the garden.

each, \$1.50

"Cinnabar"—Strong-stemmed, maroon-colored upright lily with deepest green, glossy foliage. The flowers are borne on long pedicels and are well-spaced. The deep maroon-red color glows in the sun and shows a remarkable depth. Fine in slight shade as well as full sun. For cutting and for border planting.

each, \$5.00

"Enchantment", U.S. Plant Patent 862—Seems to be the most prolific, as well as the most beautiful of all the lilies that we have raised. It may be worth noting that this lily grew from seed planted in the spring of 1942 and that, while our stocks are still small, only eight years later, we have enough bulbs to warrant color plating and commercial introduction. Enchantment is an upright lily of excellent habit, with many well-formed flowers of a vivid Nasturtium-Red. Full of life and depth the color blazes in the sun and even on dark days the little stock of Enchantment could be seen from miles away. This lily which has been so well endowed by nature, carries large numbers of bulbils in the axils of the leaves. It can also be propagated quite readily from scales and we have found that its vivid coloring is a dominant factor, so that it is transmitted to nearly all its seedlings.

We believe that in Enchantment we have raised the most promising new hardy lily of the century. It is a completely new type of lily, vigorous, hardy, disease-resistant, and virtually indestructible, if only the very slightest care is given to it. We obtained a plant patent on this lily and it may not be grown commercially without our express consent.

each, \$1.00

"Harmony"—Wide-petaled, upright flowering lily in shades of rich and brilliant orange. Early flowering, it proved to be one of the finest in all our trials and was much admired by visitors. Long pedicels, large flowers, fine for cutting and large flower arrangements.

each, \$1.50

"Pagoda"—Is one of the tallest uprights in our present collection. Scaled bulbs grew good three feet stems and we believe that in the garden mature bulbs will produce stems of four feet. The flowers, six to eight carried on good pedicels and nicely arranged, are of a true orange-chrome or Marigold orange. This lily sems to be a "natural" for large flower arrangements.

each, \$1.50

We offer a limited number of Mid-Century Hybrids in mixed types and colors, flowering size. each, \$1.00

L. nepalense—We are very glad to be able to offer this rare and most beautiful lily from central and western Himalaya. The bell-shaped, pendant flowers are of a rich emerald-green color, stained deepest wine-purple on the inside. The largest specimen on our farms showed five flowers, well spaced on a four foot stem. It may be that mature specimens will be taller. This lily, which reputedly is not hardy, withstood our coldest winter without difficulty. We believe that its main requirement is not so much warmth as moisture, for test lots grown by us in entirely different locations did uniformly well. It produces bulblets on the long, wandering, underground part of the stems.

each, \$2.00

RAINBOW HYBRIDS

RAINBOW HYBRIDS —

The result of hybridizing various upright-flowering species, these lilies all have cup-shaped flowers that, like tulips, stand straight up. The colors vary from true golden yellow, through all shades of orange to deepest mahogany-red. We have grown this strain now for several years and each summer we are pleasantly surprised to note the gay and sparkling colors of these fine, vigorous lilies. Since we grow the strain from seed, it is entirely free from all bulb-borne diseases and pests. We offer them in mixed colors at \$250.00 per 1000.

From among the acres of these upright flowering hybrids we have selected four varieties which we offer under name, as follows:

"Flamingo"—A vigorous, upright-flowering lily with very dark green, glossy foliage and enormously large, wide-petaled flowers of great substance. The color, as the name indicates, is a soft flamingo-pinkish-orange, a most pleasing blend that fits in well with other early summer flowers. Forcing tests have indicated that Flamingo can be flowered under glass in late February and March. Once sufficient stock can be accumulated it will, therefore, be a good florist flower. At present, however, the demand from the bulb dealers for garden plantings takes up our entire supply.

each, \$1.00

"Mandarin"—A sister seedling of Flamingo, has the same vigor and appearance except for the color which is a true Chinese, Mandarin-red. This lily has real sparkle and character, the glossy deep green foliage forming a fine foil for the brilliant flowers.

each, \$3.00

"Radiance"—Another sister seedling of Flamingo, stood out so prominently in our fields that we felt it should be named and perpetuated. A warmer and softer red than Mandarin it has a very definite place in the garden, along with the others.

each, \$2.00

"Tangerine"—As the name indicates is of a soft, true tangerine-orange coloring. We introduced this lily two years ago and the demand from gardeners who had seen it was so strong that we had to withdraw it again. Once more we have a little stock accumulated and we offer it in limited quantities.

each, \$3.00

L. pardalinum giganteum "Sunset"—One of the most popular lilies we grow, this supposed natural hybrid between L. Humboldtii and L. pardalinum is a trouble free, strong growing lily which does well in almost any situation. As the other hybrids of the west coast native lilies, it prefers slight shade and moist, cool soil. Plant 4 to 5 inches deep, in a location where it can grow undisturbed and it will rapidly form a large clump.

Height 4 to 6 feet. The bright red tipped recurved flowers open in early July.

per 1000, 5-6", \$140.00; 6-7", \$180.00

L. pumilum—Formerly called *L. tenuifolium* or the Coral lily, is one of the most easily grown and most popular lilies in this country. On thin, wiry stems, seldom more than two feet tall, numerous bright scarlet or lacquer-red flowers are borne. Prefers full sun and a well-drained location. Stem-rooting, plant four inches deep.

per 1000, 3-4", \$75.00; 4-5", \$100.00

L. pumilum "Golden Gleam"—Seems to us to be merely a lighter, orange-colored form of *L. pumilum*. Using the lightest colored forms we are striving to obtain a more marked differentiation in color and hope eventually to be able to re-introduce the original form of this nice lily which was reputed to have been goldenyellow.

per 1000, 3-4", \$100.00; 4-5", \$120.00

L. regale—This most widely grown of all trumpet lilies was introduced in 1903 by E. H. Wilson and was distributed by the Wayside Gardens just prior to World War I. In our considered opinion L. regale as it is offered now in the trade has nothing to recommend it. It is a most prolific, sturdy and hardy trumpet lily but the flowers are smaller than in many of the new hybrid strains and the inflorescence leaves much to be desired. L. regale is not a true species, just a fast breeding variety of L. leucanthum and one that has such strong maternal inheritance that it always reproduces itself. It is far surpassed by L. centifolium "Olympic Hybrids". We still grow a small stock of a particularly fine form of L. regale and offer it at a new, low price. We recommend to all customers, however, that they drop this lily from their current listing as the public is far more interested in the much finer hybrids, now offered at very reasonable prices.

per 1000, 6-7", \$60.00; 7-8", \$80.00; 8-9", \$100.00

L. Sargentiae—We offer the true form of this species which is interesting and valuable because of its habit of bearing stem bulbils in the axils of the leaves. The flowers are true trumpet shape, somewhat longer and more formal than the Olympic Hybrids. Not so free flowering nor as tall as the other trumpets, it is none the less distinctive and particularly valuable where a perfectly uniform planting is desired. Compatible with several other species and hybrids it is very useful in hybridizing and is a parent of several well known hybrids.

Of the same general culture of the Olympic Hybrids, L. Sargentiae flowers even later and extends the season another ten days to two weeks.

per 1000, 6-7", \$300.00; 7-8", \$400.00

L. "Shuksan"—By far the best of the hybrids named and introduced by the late Dr. David C. Griffith. It is the result of a cross between L. Humboldtii magnificum and L. pardalinum. A handsome, easily grown, disease resistant garden lily. Similar in type and habit to our Bellingham Hybrids of which it is one of the parents, L. Shuksan is happy under the same conditions and treatment. The bulbs are comparatively large and transplant easily if not held in storage too long or allowed to dry out.

per 1000, 5-6", \$250.00; 6-7", \$300.00

L. speciosum album—The highly prized white form of Speciosum rubrum. Somewhat smaller and less robust than the type. It is, however, not difficult to grow. Our stocks have been free from basal rot and mosaic infections so prevalent among imported bulbs and these two factors have in the past been largely responsible for the frequent failures with this lily. Flowering ten days to two weeks later than the red form, it is one of the loveliest of cut flowers. Light shade is necessary in warmer climates to prevent the flowers from burning and opening too rapidly. per 1000, 6-7", \$800.00; 7-8", \$1000.00

L. speciosum rubrum "Red Champion"—A variety of the red showy lily of Japan. A grand clone for garden decoration, cut flowers or pot culture in a cool greenhouse. Our strain is uniform, disease free and vigorous. The foundation stock was discovered locally on the slopes of Mount Hood, where it had grown undisturbed for some forty years. This lily has not proven to be as difficult as many writers would have us believe. A situation in well drained soil where it can receive light shade during the hottest part of the day is the main requirement for successful culture. The heavy basal roots make a fall growth and consequently it may require a year to become well established. The smaller sized bulbs suffer less shock in transplanting and are recommended

for general garden purposes. Plant the bulbs 6 inches deep. Late August and early September flowering. per 1000, 6-7", \$500.00; 7-8", \$600.00; 8-9", \$750.00

L. "Talisman"—We offer this year only one lily which besides Tigrinum-Umbellatum blood also markedly shows L. Willmottiae blood. This is the choice novelty "Talisman" which we describe as follows: This is a lily which in flowering habit and color resembles the well-known L. Maxwill, but which bears numerous blackbrown bulbils in the axils of the dark-green leaves. It has shown itself to be of great value in breeding, but should also find ready acceptance as a garden plant. This lily will bear up to fifteen large, nodding flowers with reflexed petals, orange-red in color and densely spotted with purplish black. The thin, but very strong and wiry stem grows up to six feet tall. The bulb is of medium size. It flowers in July when its brilliant coloring makes it quite conspicuous in the garden.

per 1000, 4-5", \$300.00; 5-6" \$400.00

L. tigrinum, var. splendens—The well-known Tiger lily from China and Japan. The large scentless, nodding flowers open late in August and are of a peculiar and attractive pinkish-orange coloring, heavily spotted with purplish-black dots. This lily produces numerous black bulbils in the axils of the leaves. The form we offer is the best of all Tiger lilies.

per 1000, 4-5", \$150.00; 5-6", \$200.00

L. tigrinum, var. flore-pleno—A double-flowering monstrosity which we grow in small quantity because some old-fashioned seedsmen persist in listing it. It has a few extra petals but nothing else distinguishes it from the ordinary Tiger lily. Our selected forms of the Splendens variety make a much better garden plant.

per 1000, 4-5", \$200.00; 5-6", \$240.00

®RECISTERED TRADEMARK—This designation should be used by all our customers since it will protect them, as much as us, against unfair competition of untrue stock. Our Lily Hybrids ® are constantly re-selected and the 1950 offering is far superior to that of previous years.

Our farms are located near Dodge Park, a municipal picnic ground on the Sandy River, 23 miles east of Portland. They are open to visitors every day of the week, including Sundays. Driving from Portland, the best road is to cross Ross Island Bridge, go straight east on Powell Boulevard through Gresham and follow the signs to Dodge Park.

OREGON BULB FARMS
GRESHAM, OREGON

REFERENCE CHART OF GARDEN LILIES

<u></u>		Shape	Color	Height	D1	Flower	Cover		Stem
A 3 + 7		D			Plant	Date	Depth	Fragrant	Roots
Amabile		Recurved Bowl Varies	Red White Varies	2-3' 4-6' 5-7'	Sun Part Shade Part Shade	6/16-7/15 7/15-9/30 7/15-8/31	3-4" 5-6" 5-6"	no yes yes	yes yes yes
Bellingham	H(2)	Recurved	Varies	4-6'	Part Shade	6/15-7/31	3-4"	yes	no
Candidum	H(3) S S	Funnel Trumpet Recurved Recurved Star	White White Lilac Red Red	4-6' 4-6' 2-3' 3-4' 2-3'	Sun Sun Part Shade Sun Sun	6/15-6/30 7/1 -7/15 7/1 -7/15 7/1 -7/15 6/15-7/15	1-" 5-6" 3-" 3-"	yes yes no no no	no yes yes no yes
Davidii	S(4)	Recurved	Red	4-5'	Sun	7/1 -7/31	5-"	no	yes
FiestaFormosanum		Recurved Trumpet	Varies White	4-5' 4-6'	Sun Sun	7/1 -7/31 8/15-9/15	5-" 5-"	no yes	yes yes
Giganteum		Funnel Erect	White Yellow	6-8' 2-3'	Shade Sun	6/15-6/30 5/15-5/31	1-" 5-"	yes no	yes yes
Hansonii Henryi		Recurved Recurved	Yellow Orange	3-4′ 5-6′	Shade Part Shade	6/1 -6/15 8/1 -8/31	5-" 5-6"	no no	yes yes
Longiflorum	S(7)	Trumpet	White	1-2'	Sun	7/1 -7/15	5-"	yes	yes
Martagon	S	Recurved	Varies	2-3'	Part Shade	6/1 -6/30	3-"	no	no
Pumilum	S	Recurved	Varies	1-2'	Sun	5/15-6/15	3-"	no	yes
Regale	S	Trumpet	White	3-4'	Sun	6/15-6/30	5-"	yes	yes
Sargentiae		Trumpet Recurved	White Varies	4-5′ 3-4′	Sun Part Shade	7/15-8/15 8/1 -8/31	5-" 5-"	yes faint	yes yes
TestaceumTigrinum		Recurved Recurved	Apricot Salmon	3-4' 3-4'	Sun Sun	6/15-6/30 8/15-8/31	3-" 5-"	yes no	no yes
Umbellatum	Н	Erect	Varies	2-3'	Sun	6/1 -6/30	4."	no	yes

FOOTNOTES: Each species or hybrid listed should be considered as representative of the related varieties and strains. Thus the characteristics listed for *L. amabile* are valid also for *L. amabile luteum* except that the latter is golden yellow. *L. auratum* includes all the varieties, L. Bellingham Hybrids characteristics are, in the main, also valid for all the American natives, the most prominent of which are listed separately under (2. The descriptions and instructions given for each of the 25 major divisions cover also, with minor modifications, related lilies as listed below.

- (1)—Aurelian Hybrids include such types as Sunburst, Heart's Desire and Golden Clarion.
- (2)—Bellingham Hybrids include most American natives such as L. canadense, L. superbum, L. pardalinum, L. Parryi and L. Humboldtii, etc.
- (3)—Centifolium to include Olympic Hybrids, Green Mountain Strain, Green Dragon Strain and Pink Selections.
- (4)-Davidii to include Willmottiae, Willmottiae unicolor, Talisman, Maxwill.
- (5)—Fiesta Hybrids to include Lillian Cummings.
- (6)—Golden Chalice Hybrids to include also Radiance, Mandarin, Tangerine, Flamingo.
- (7)—Longiflorum to include such varieties as Croft, Estate and Ace.
- (8)—Tigrinum Hybrids— {Erect: Pagoda, Campfire, Enchantment, Bonanza. Outward facing: Fireflame, Parade, Serenade, Vagabond, Valencia.

DEALERS' PRICES - 1950

BULBS IN BOXES

This year we can offer a limited number of packaged bulbs in colorful boxes, especially designed and made for us.

"Garden of Lilies"—Will contain five varieties, two bulbs of each. The bulbs will be wrapped in our special vegetable parchment squares, which will show variety name and description as well as cultural directions. Two each of L. centifolium "Olympic Hybrids", L. "Bellingham Hybrids", L. pardalinum giganteum "Sunset", L. umbellatum "New Hybrids", and two bulbs from any one of the following: L. formosanum, L. Maxwill, L. amabile or L. longiflorum will be used, our choice. This collection will be packed in cases of 24 boxes and is offered for the special price of \$1.75 per collection.

"Olympic Hybrid Lilies"—Three seven inch bulbs of this magnificent new strain of hybrid lilies. Packed in a specially designed box, printed in five colors. Packed in cases of 36 boxes and priced at \$0.60 per box.

"Bellingham Hybrid Lilies"—Three top-sized bulbs of this magnificent hybrid strain of American lilies, all of them vigorous, hardy and easy to grow. Ideal for cut flowers. Packed in a specially designed box printed in five colors, in cases of 36 boxes priced at \$0.70 per box.

"Mixed Dutch Iris"—Twelve top quality iris bulbs in a beautifully designed and printed box with full color reproduction of the flowers—in cases of 60 boxes offered at \$0.30 per box.

"Garden of Hybrid Daffodils"—A box containing a magnificent mixture of our seedling daffodils, the cream of our immense stock of hand-pollinated hybrids, in all types and colors. Twelve top quality bulbs. Offered in cases of 24 boxes at \$0.60 per box. Box printed in five colors—new design.



DEALERS' PRICES - 1950

All prices are per 1000, unless otherwise specified, f.o.b. Gresham, Oregon. All bulbs offered are from our own, disease-free, selected stocks, guaranteed true to name. See pages 32-45 for full descriptions.

MINIATURE DAFFODILS—DIVISION 10

N. bulbocodium conspicuus (yellow hoop petticoat) \$ 40.00	N. jonquilla flore pleno
N. bulbocodium citrinus, lemon	N. juncifolius (miniatu
N. canaliculatus (miniature Poetaz)	N. minimus (smallest
N. cyclamineus (cyclamen flowered)None to Offer	N. triandrus albus (A
N. jonguilla simplex (true, single	N. triandrus calathinus
sweetscented French jonquil) 40.00	very rare)

N. jonquilla flore pleno (double French jonquil	\$	50.00
N. juncifolius (miniature jonquil)		60.00
N. minimus (smallest daffodil)	0	Offer
N. triandrus albus (Angel's Tears	2	00.00
N. triandrus calathinus (larger than albus,		
very rare)	3	00.00

TRUMPET DAFFODILS—DIVISION 1

LARGE-CUPPED DAFFODILS—DIVISION 2

TRUMPET DAFFODILS—DIVISION 1		LARGE-CUPPED DAFFUDILS	DIA121	ON 2
				DN 2
YELLOW TRUMPET DAFFODILS—1a	DN 2		DN 1	& RD
DN 1	& RD	Adler, M	\$120.00	\$100.00
Aerolite, E	\$ 50.00	Bernardino, M		48.00
Alaska, M. 80.00	60.00	Carbineer		600.00
Alasnam, E	60.00	Carlton, M	70.00	50.00
Ben Hur, M. 120.00	100.00	Croesus, M	60.00	48.00
Dawson City, L	80.00	Daisy Schaffer, E		160.00
Diotima, E	320.00	Damson, E		60.00
February Gold, E.E	60.00	Delaware, M		96.00
Golden Harvest, E	90.00	Dick Wellband, L		85.00
Hector Treub 70.00	50.00	E. H. Wilson, M.		80.00
King Alfred, M	50.00	Fortune, E		96.00
King Alfred, Jumbo	240.00	Francisca Drake, M		50.00
Successor 70.00	50.00	Gertie Millar, M		120.00
Winter Gold, E	50.00	Goldona		320.00
Yellow Cloud, M	60.00	Golden Pedestal, E		80.00
		Hades, M.		160.00
		Havelock, M		60.00
		Helios, E		48.00
BICOLOR DAFFODILS—1b		John Evelyn, M		90.00
T f. T	700.00	Lucinius, L.		60.00
Jefta, E	100.00	Milford Haven, L		100.00
Lovenest, M	$160.00 \\ 120.00$	Nova Scotia, M		100.00
Spring Glory, M	80.00	Orange Glow, M		60.00
Victoria, L	80.00	Pirate's Gold, E (new)	400.00	320.00
120002143 22	00.00	Quicksilver, M		160.00
		Red Bird, L		720.00
		Red Cross, M		100.00
WHITE TRUMPET DAFFODILS—1c		Red Shadow, L		80.00
A 7 Th		St. Egwin, M		320.00
Ada Finch, E E	\$480.00	Scarlet Leader, L		480.00
Beersheba, M	240.00	Silver Star, E		80.00
Eskimo, M	260.00 130.00	Sir Watkin, (improved), E.		48.00
Mrs. E. H. Krelage, M	110.00	Tunis, E		85.00
Mrs. John C. Bodger, L	320.00	Veronica, L (pink)	300.00	240.00
Mrs. R. O. Backhouse, L. 200.00	160.00	Walter Hampden, L	100.00	80.00
President Carnot, E	160.00	Whiteley Gem, E	120.00	100.00
Roxane, M	120.00	Yellow Poppy, L	70.00	54.00
	_	X X / /		

No.	SHORT-CUPPED DAFFODILS—I	DIVISI	ON 3	CYCLAMINEUS HYBRIDS—DIVIS	ION	б
Alcida, M			DN 2	Rervl E \$10	0.00	\$ 80.00
Alcida, M		DN 1	& RD	February Gold, EE 7	5.00	
Diana Kasner, E	Alcida, M	70.00	\$ 55.00			
Diama Kasner, E				·		
Eclair, L. 200.00 160.00 Campernelle single, E. \$ 50.00 \$ 40.00 Edith, L. 160.00 120.00 Campernelle double, E. 60.00 48.00 Firetail, M. 120.00 100.00 Golden Perfection, M. 80.00 60.00 Lady Diana Manners 100.00 80.00 Colden Sceptre, M. 60.00 48.00 Lady Kesteven, L. 300.00 240.00 Jonquilla simplex, LL (single) 40.00 Magifower 70.00 56.00 Orange Queen, E. 80.00 64.00 Mrs. Barclay, M. 70.00 56.00 Sierra Gold, L. 60.00 48.00 Nette O'Melveny, E. 60.00 48.00 Trevithian, M. 60.00 48.00 Queen of the North, E. 60.00 48.00 Trevithian, M. 60.00 48.00 Sunstar 160.00 120.00 Cheerfulness L. \$ 50.00 \$ 40.00 Campernelle double, E. 60.00 48.00 Cheerfulness L. \$ 50.00 \$ 40.00 Campernelle double, E. 60.				JONQUILLA HYBRIDS—DIVISION	N 7	
Edith, L.		200.00		Campernelle single, E	0.00	\$ 40.00
Firetail, M				Campernelle double. E		
Hera, M.			100.00	Golden Perfection, M 8		60.00
Lady Diana Manners			48.00	Golden Sceptre, M	0.00	48.00
Lady Kesteven, I. 300,00 240,00 Magic Fire. 240,00 200,00 Lanarth, M. 60,00 48,00 64,00 Mayflower 70,00 56,00 Mrs. Barclay, M. 70,00 56,00 Mystic, L. 200,00 160,00 Mystic, L. 200,00 Moulin Rouge, M. 160,00 120,00 Moulin Rouge, M. 160,00	Lady Diana Manners	100.00	80.00	Jonquilla simplex, LL (single)		40.00
Magic Fire. 240.00 Mayflower 70.00 56.00 orange Queen, E. 80.00 64.00 das.00 Mrs. Barclay, M. 70.00 56.00 orange Queen, E. 80.00 64.00 das.00 Mystic, L. 200.00 l60.00 das.00 48.00 das.00 das.00 Outer O'Melveny, E. 60.00 das.00 das.00 das.00 48.00 das.00 das			240.00			50.00
Mayflower 70.00 56.00 Mrs. Barclay, M 70.00 56.00 Sierra Gold, L Orange Queen, E 80.00 64.00 48.00 48.00 Mystic, L 200.00 160.00 Mystic, L Company Compa			200.00	Lanarth, M	0.00	48.00
Mrs. Barclay, M 70.00 56.00 Mystic, L Sierra Gold, L 60.00 48.00 date Nette O'Melveny, E 60.00 48.00 date Trevithian, M 60.00 48.00 date Queen of the North, E 60.00 48.00 date POETAZ DAFFODILS—DIVISION 8 Rose Marie, L 160.00 120.00 degranium, L 60.00 date 48.00 degranium, L	Mayflower		56.00	Orange Oueen, E	80.00	64.00
Mystic, L. 200.00 Nette O'Melveny, E. 60.00 48.00 Queen of the North, E. 60.00 48.00 POETAZ DAFFODILS—DIVISION 8 Rose Marie, L. 160.00 120.00 Sunstar 160.00 120.00 Id.00 Cheerfulness L. \$50.00 \$40.00 \$48.00 Goranium, L. \$60.00 48.00 Goranium, L. Geranium, L. 60.00 48.00 Goranium, L. \$60.00 40.00 Goranium, L. \$60.00 Goranium, L.	Mrs. Barclay, M	70.00	56.00	Sierra Gold, L	0.00	48.00
Nette O'Melveny, E.	Mystic, L	200.00	160.00		0.00	48.00
Queen of the North, E 60.00 48.00 POETAZ DAFFODILS—DIVISION 8 Sunstar 160.00 120.00 Cheerfulness L \$50.00 \$40.00 DOUBLE DAFFODILS—DIVISION 4 Albus plenus odoratus, LL 60.00 48.00 Goranium, L 60.00 48.00 Cheerfulness, L 60.00 48.00 Cheerfulness L 50.00 44.00 Cheerfulness, L 50.00 48.00 Cheerfulness L 50.00 48.00 Cheerfulness, L 50.00 48.00 Cheerfulness L 60.00 48.00 Cheerfulness, L 60.00 48.00 Cheerfulness L 60.00 48.00 Cheerfulness, L 50.00 48.00 Cheerfulness L 50.00 44.00 Laurens Koster, E 50.00 40.00 Cheerfulness L 70.00 56.00 Indian Chief, M 80.00 64.00 Cheerfulness L 70.00 56.00 Mary Copeland, E 200.00 160.00 Winter Pride, E 70.00 56.00 Royal Sovereign, M 140.00	Nette O'Melveny, E	60.00	48.00	, and the second		
Sunstar			48.00	POETAZ DAFFODILS—DIVISION	8	
DOUBLE DAFFODILS—DIVISION 4	Rose Marie, L	160.00	120.00	Cheerfulness L \$ 5	0.00	\$ 40.00
Albus plenus odoratus, LL. 60.00 48.00 Campernelle double, E. 60.00 48.00 Cheerfulness, L. 50.00 40.00 Cheerfulness, L. 50.00 40.00 Indian Chief, M. 80.00 64.00 Irene Copeland, E. 200.00 Indian Chief, M. 160.00 120.00 Mary Copeland, L. 240.00 200.00 Moulin Rouge, M. 160.00 120.00 Snowsprite (White) L. 80.00 64.00 Texas, E. 200.00 160.00 The Pearl, E. 80.00 64.00 Twink, E. 90.00 72.00 The Position F. Shot Silk, M. 160.00 128.00 Silver Chimes, L. 300.00 240.00 Silver Chimes, L. 300.00 240.00 Cheerfulness (Mary Copeland, L. 240.00 200.00 Mary Copeland, L. 240.00 200.00 Moulin Rouge, M. 160.00 120.00 Royal Sovereign, M. 140.00 110.00 Snowsprite (White) L. 80.00 64.00 Texas, E. 200.00 160.00 Glory of Lisse, M. 55.00 44.00 Recurvus, LL 55.00 44.00 Recurvus, LL 55.00 44.00 Recurvus, LL 55.00 44.00 The Pearl, E. 300.00 \$80.00 Shot Silk, M. 160.00 128.00 Shot Silk, M. 160.00 128.00 Silver Chimes, L. 300.00 240.00 L. L. Late.	Sunstar	160.00	120.00			48.00
Albus plenus odoratus, LL. 60.00 48.00 Campernelle double, E. 60.00 48.00 Cheerfulness, L. 50.00 40.00 Cheerfulness, L. 50.00 40.00 Indian Chief, M. 80.00 64.00 Irene Copeland, E. 200.00 Indian Chief, M. 160.00 120.00 Mary Copeland, L. 240.00 200.00 Moulin Rouge, M. 160.00 120.00 Snowsprite (White) L. 80.00 64.00 Texas, E. 200.00 160.00 The Pearl, E. 80.00 64.00 Twink, E. 90.00 72.00 The Position F. Shot Silk, M. 160.00 128.00 Silver Chimes, L. 300.00 240.00 Silver Chimes, L. 300.00 240.00 Cheerfulness (Mary Copeland, L. 240.00 200.00 Mary Copeland, L. 240.00 200.00 Moulin Rouge, M. 160.00 120.00 Royal Sovereign, M. 140.00 110.00 Snowsprite (White) L. 80.00 64.00 Texas, E. 200.00 160.00 Glory of Lisse, M. 55.00 44.00 Recurvus, LL 55.00 44.00 Recurvus, LL 55.00 44.00 Recurvus, LL 55.00 44.00 The Pearl, E. 300.00 \$80.00 Shot Silk, M. 160.00 128.00 Shot Silk, M. 160.00 128.00 Silver Chimes, L. 300.00 240.00 L. L. Late.	DOUBLE DATEODIES DIVISIO	W.T. 4		Glorious, E	60.00	48.00
Albus plenus odoratus, LL 60.00 48.00 Laurens Koster, E 50.00 40.00 Campernelle double, E 60.00 48.00 L'Innocence 70.00 56.00 Cheerfulness, L 50.00 40.00 Orange Cup 70.00 56.00 Indian Chief, M 80.00 64.00 St. Agnes, L 70.00 56.00 Irene Copeland, E 200.00 Winter Pride, E 70.00 56.00 Mary Copeland, L 240.00 200.00 Winter Pride, E 70.00 56.00 Moulin Rouge, M 160.00 120.00 Actaea, E \$60.00 \$48.00 Snowsprite (White) L 80.00 64.00 Glory of Lisse, M 55.00 44.00 Texas, E 200.00 72.00 Fecurvus, LL 55.00 44.00 Twink, E 90.00 72.00 Fecurvus, LL 55.00 44.00 Key: EE Extra Early. Shot Silk, M 160.00 128.00 M —Medium. Silver Chimes, L 300.00 240.00 L —Late.	DOUBLE DAFFODILS—DIVISIO	N 4		Klondyke, M	55.00	44.00
Campernelle double, E. 60.00 48.00 L'Innocence 70.00 56.00 Cheerfulness, L. 50.00 40.00 Orange Cup. 70.00 56.00 Indian Chief, M. 80.00 64.00 St. Agnes, L. 70.00 56.00 Irene Copeland, E. 200.00 160.00 Winter Pride, E. 70.00 56.00 Mary Copeland, L. 240.00 200.00 Winter Pride, E. 70.00 56.00 Moulin Rouge, M. 160.00 120.00 Actaea, E. 60.00 48.00 Snowsprite (White) L. 80.00 64.00 Dulcimer, L. 60.00 48.00 Texas, E. 200.00 160.00 Glory of Lisse, M. 55.00 44.00 Twink, E. 90.00 72.00 TRIANDRUS HYBRIDS—DIVISION 5 EE—Extra Early. Moonshine, M. \$100.00 \$80.00 M.—Medium. Silver Chimes, L. 300.00 240.00	Albus plenus odoratus, LL	60.00	48.00		00.00	40.00
Indian Chief, M		60.00	48.00	L'Innocence	70.00	56.00
Irene Copeland, E. 200.00 160.00 Mary Copeland, L. 240.00 200.00 Moulin Rouge, M. 160.00 120.00 Royal Sovereign, M. 140.00 110.00 Snowsprite (White) L. 80.00 64.00 Texas, E. 200.00 160.00 The Pearl, E. 80.00 64.00 Twink, E. 90.00 72.00 TRIANDRUS HYBRIDS—DIVISION 5 Moonshine, M. \$100.00 \$80.00 \$80.00 Silk, M. 160.00 128.00 Silver Chimes, L. 300.00 240.00 Winter Pride, E. 70.00 56.00	Cheerfulness, L	50.00	40.00		70.00	56.00
Irene Copeland, E. 200.00 160.00 Mary Copeland, L. 240.00 200.00 Moulin Rouge, M. 160.00 120.00 Royal Sovereign, M. 140.00 110.00 Snowsprite (White) L. 80.00 64.00 Texas, E. 200.00 160.00 The Pearl, E. 80.00 64.00 Twink, E. 90.00 72.00 TRIANDRUS HYBRIDS—DIVISION 5 Moonshine, M. \$100.00 \$80.00 \$80.00 Silk, M. 160.00 128.00 Silver Chimes, L. 300.00 240.00 Winter Pride, E. 70.00 56.00	Indian Chief, M		64.00	St. Agnes, L		
Mary Copeland, L	Irene Copeland, E.	200.00	160.00	Winter Pride, E	70.00	56.00
Royal Sovereign, M 140.00 110.00 Actaea, E \$ 60.00 \$ 48.00 Snowsprite (White) L 80.00 64.00 Dulcimer, L 60.00 48.00 Texas, E 200.00 160.00 Glory of Lisse, M 55.00 44.00 The Pearl, E. 80.00 64.00 Recurvus, LL. 55.00 44.00 Twink, E. 90.00 72.00 Key: Key: TRIANDRUS HYBRIDS—DIVISION 5 EE—Extra Early. Moonshine, M. \$100.00 \$80.00 E—Early. Shot Silk, M. 160.00 128.00 M—Medium. Silver Chimes, L. 300.00 240.00	Mary Copeland, L	240.00	200.00	DODUCTOR DATEODIC DIVISIO	ANT O	
Snowsprite (White) L 80.00 64.00 Dulcimer, L 60.00 48.00 Texas, E 200.00 160.00 Glory of Lisse, M 55.00 44.00 The Pearl, E 80.00 64.00 Recurvus, LL 55.00 44.00 Twink, E 90.00 72.00 Key: EE—Extra Early. Moonshine, M \$100.00 \$80.00 E—Early. Shot Silk, M 160.00 128.00 M—Medium. Silver Chimes, L 300.00 240.00 L—Late.			120.00			
Texas, E						W
The Pearl, E	Snowsprite (White) L	80.00		Duiotilion, Linearing		
Twink, E						
TRIANDRUS HYBRIDS—DIVISION 5 Key: Moonshine, M				Recurvus, LL	55.00	44.00
TRIANDRUS HYBRIDS—DIVISION 5 EE—Extra Early. Moonshine, M. \$100.00 \$80.00 E—Early. Shot Silk, M. 160.00 128.00 M—Medium. Silver Chimes, L. 300.00 240.00 L—Late.	Twink, E	90.00	72.00	T2		
Moonshine, M. \$100.00 \$80.00 E — Early. Shot Silk, M. 160.00 128.00 M — Medium. Silver Chimes, L. 300.00 240.00 L — Late.	TRIANDRUS HYRRIDS_DIVISI	ON 5		· ·		
Shot Silk, M 160.00 128.00 M — Medium. Silver Chimes, L 300.00 240.00 L — Late.			A 00 00			
Silver Chimes, L. 300.00 240.00 L.—Late.			14			
Olive dillino, Lincoln dovido						
Thalia, E						
	Thalia, E	140.00	110.00	LL—Extra Late.		

MIXTURES FOR NATURALIZING:

Seedling Mixture	70.00	56.00
Novelty Mixture\$	60.00	\$ 48.00
Standard Mixture	50.00	40.00

Mixtures contain all types and are well assorted in early and late varieties. The seedling mixture is actually made up out of new types grown from seed and we recommend it strongly.

"Garden of Hybrid Daffodils" ---

A box containing a magnificent mixture of our seedling daffodils, the cream of our immense stock of hand-pollinated hybrids, in all types and colors. Twelve top quality bulbs. Offered in cases of 24 boxes at \$0.60 per box. Box printed in five colors—new design.

LEUCOJUM

(Snowflakes)—Vernum, good flowering size)
Gravetye Giant, a distinctive novelty with extra large flowers and strong foliage. Plant in shady situation and allow to become established)

DEALERS' PRICES - 1950

All prices are per 1000, unless otherwise specified, f.o.b. Gresham, Oregon. All bulbs offered are from our own, disease-free, selected stocks, guaranteed true to name.

IRIS

IRIS—Standard Varieties						
All prices per 1000	$5/6 \mathrm{cM}$	$6/7 \mathrm{cM}$	$7/8 \mathrm{cM}$	8/9 cM	9/10 cM	10/11 cM
TINGITANA HYBRID Wedgwood	*******			\$25.00	\$40.00	\$50.00
DUTCH HYBRIDS,						
Blue Horizon, sky-blue		\$25.00	\$35.00	\$45.00		
D. HARING, white		30.00	35.00	45.00		
IMPERATOR, dark blue		25.00	35.00	45.00		
WHITE Excelsion, white		35.00	45.00	55.00		
YELLOW QUEEN, golden vellow	\$20.00	25.00	40.00			

DUTCH HYBRIDS, novelties

A. VAN NIEROP (de Graaff)—Standards white, fall golden yellow. A great improvement over the old Leonardo da Vinci and a novelty we can recommend.

per 1000, \$45.00

C. G. VAN WIERINGEN (de Graaff)—A uniform deep golden yellow, massive falls and standards, height 30", A.M.H. 1931, F.C.C.H. 1934. per 1000, \$45.00

EDWARD SALBACH (Salbach-de Graaff)—Of the same strain as National Velvet, this iris is much later flowering and further distinguished by the bright orange, almost circular spot on the falls. A market flower of great possibilities and one worthy of a name famous in the iris world.

**per 1000, \$80.00*

Gerrit van Hees (de Graaff)—A beautiful uniform soft blue, tall, attractive garden iris, A.M.H. 1931.

per 1000, \$45.00

Golden Lion—The ruffled golden yellow Spanish iris that has created a sensation whenever shown. This very late flowering, beautifully proportioned flower is of great value for cutting. F.C.C.H. 1924. per 1000, \$100.00

H. C. VAN VLIET (de Graaff)—A soft violet-blue iris with Indian-orange stripe on the falls. Strong, disease-resistant grower, F.C.C.H. 1934.

per 1000, \$45.00

NATIONAL VELVET (Salbach-de Graaff)—A new hybrid iris of a deep, rich velvety violet-purple color. This is an entirely new hybrid, but since it resembles the Dutch iris in all respects except color, we list it here with the others.

per 1000, \$80.00

ROYAL PURPLE (Salbach-de Graaff)—A rich purple edition of National Velvet, it has the same shape and habit, but definitely a very different shade of coloring. We consider this iris as one of great market value and test shipments to leading florists have indicated that it will meet with a very keen demand as soon as it is available in quantity.

per 1000, \$120.00

S. DE VLIEGER (de Graaff)—A tall, light blue iris with narrow orange stripe on falls. F.C.C.H. 1930.

per 1000, \$40.00

THERESE SCHWARTZE (de Graaff)—Once again we can offer a small quantity of this delightful orchid-like flower. The falls are creamy white, the standards a soft lilac-blue. Tall, thin and wiry stems and an exceptionally long lasting habit make this one of the favorites for cutting. F.C.C.H. 1925.

per 1000, \$45.00**

VIOLET QUEEN (de Graaff)—Both standards and falls are of a uniform rich yet soft, violet or lilac coloring. Very large flower of fine proportions, ideal for cutting. A.M.H. 1927.

per 1000, \$50.00

WHITE PERFECTION (de Graaff)—A uniform pure white iris, the best white yet raised. F.C.C.H. 1945.

per 1000, \$200.00

muna subita inia mat

WHITE SUPERIOR (de Graaff)—A pure white iris, not quite as tall as White Perfection, but much taller than White Excelsior. F.C.C.H. 1935.

per 1000, \$50.00

WILLEM BUYS (de Graaff)—A large, early blue of remarkable lasting power. Large royal blue falls have a narrow golden stripe. The standards are slightly darker giving a nice effect. A.M.H. 1944. per 1000, \$45.00

DAFFODIL CHECK LIST

DESCRIPTIONS

PRICES

Oregon Bulb Farms
GRESHAM, OREGON

Daffodil Check List, Descriptions and Prices

On March 28th of the year 1899 the golden yellow trumpet daffodil King Alfred received a First Class Certificate from the Royal Horticultural Society of England, the highest honor that august body could bestow on any flower. Now, fifty years later, untold millions of King Alfred bulbs are produced annually. Here, on the Pacific Coast some thousand acres of fertile land are planted to this variety, accounting for more than fifty million bulbs. The number of bulbs that have been forced and destroyed by the commercial florists all over the world must be measured in the billions.

King Alfred is, undoubtedly, the most popular daffodil of our day. It has been that for the past twenty years and it may well remain at the top of the list for another twenty years. Since it first made its appearance, thousands of other daffodils have been named and introduced. Most of them have again disappeared, but gradually a few are emerging that show every sign of having attained, like King Alfred, a more or less permanent standing. That our firm has been instrumental in bringing many of these outstanding novelties before the American public is no less a matter of pride to us than the fact that many of the popular varieties of today have been raised by the de Graaffs.

Like anything, a daffodil collection must never become stagnant or it will become no more than a lifeless gathering, of historical value only. New varieties must be added; older and obsolete ones must be eliminated. This work, the selecting, judging and scoring of new and old daffodil varieties, has been our main Spring activity for over twenty years.

Nature in its inexhaustible richness is constantly adding new forms and colors to those already in existence. The past spring gave us a large group of new lemon-colored daffodils. Of very recent acquisition are also flowers of what we might call "reverse" coloring, the cup or trumpet being lighter than the perianth segments.

A few years ago it was the new pinks that attracted the attention of all daffodil lovers. They still are of great importance and our collection of them is second to none. Many of our new pinks are sweet-scented; many of them have a unique pure rose coloring. We have literally dozens of new seedlings of our own raising that because of their unusual earliness or lateness will become most valuable garden and show plants. We are building up stocks of all these novelties, but do not, as yet, offer them to the trade.

We acknowledge the fact that our collection of daffois made on the basis of our personal selection and taste. As the grandson of Simon Adrian de Graaff (1840-1911) raiser of Glory of Leiden, Apricot and Madame de Graaff and the son of William Hendrik de Graaff, who raised Aerolite, Alasnam, February Gold and many other popular daffodils, I may, I hope, lay claim to an inherited taste for daffodils. I have grown up with them and have loved them for some forty years. Enthusiasm tempered by critical appraisal, love controlled by experience and knowledge have helped to make this collection. We take pride in offering it to you.

I have keyed the daffodils in various ways. There is the obvious system of classification, as proposed by the Royal Horticultural Society of England. The figures and letters before each name indicate to which division the flower belongs. Secondly, the descriptions I have made up for all varieties should be a guide to their value for various purposes. The awards listed are also an indication of the value put on these daffodils by competent judges. Finally, there is a most obvious clue to the contemporary value of these daffodils in the prices quoted for each variety.

Price is based on intrinsic value, on beauty and usefulness, on the rate of propagation and on the relative scarcity of the plant. Other factors likewise enter into this equation and it must not be presumed that a daffodil selling for one dollar each is ten times as good in every respect as one that sells for ten cents per bulb. Time alone can give us a clue to the true relative values of these bulbs.

The revised system of classification should be used by every seedsman and at all daffodil shows. While it does simplify matters slightly to have eliminated one class, namely the Leedsii, we must always remember that these classifications are of horticultural value only and that in most instances they are not based on true botanical differences. Hence, no one could object if for bulb-catalog purposes the two medium-cupped classes are combined, nor should there be any objection if the Triandrus, Cyclamineus and the species daffodils are all grouped together as "Daffodils for the Rock Garden."

Revised System For The Classification of Daffodils

Division I

TRUMPET NARCISSI Distinguishing character: One flower to a stem; Trumpet or Cup as long as or longer than the Perianth segments.

- (a) Perianth colored; Trumpet colored, not paler than the Perianth.
- (b) Perianth white; Trumpet colored.
- (c) Perianth white; Trumpet white, not paler than the Perianth.
- (d) Any color combination not falling into the other groups.

Division II

LARGE-CUPPED NARCISSI Distinguishing characters: One flower to a stem; Cup more than one-third but less than equal to the length of the Perianth segment.

- (a) Perianth colored; Cup colored, not paler than the Perianth.
- (b) Perianth white; Cup colored.
- (c) Perianth wihte; Cup white, not paler than the Perianth.
- (d) Any color combination not falling into the other groups.

Division III

SMALL-CUPPED NARCISSI Distinguishing characters: One flower to a stem; Cup not more than one-third the length of the Perianth segments.

- (a) Perianth colored; Cup colored, not paler than Perianth.
- (b) Perianth white; Cup colored.
- (c) Perianth white; Cup white, not paler than the Perianth.
- (d) Any color combination not falling into the other groups.

Division IV

DOUBLE NARCISSI Distinguishing character: Double flowers.

Division V

TRIANDRUS NARCISSI Distinguishing characters: Characteristics of Narcissus triandrus clearly evident.

- (a) Cup not less than two-thirds the length of the Perianth segments.
- (b) Cup less than two-thirds the length of the Perianth segments.

Division VI

CYCLAMINEUS NARCISSI Distinguishing characters: Characteristics of *Narcissus cyclamineus* must be clearly evident.

- (a) Cup not less than two-thirds the length of the Perianth segments.
- (b) Cup less than two-thirds the length of the Perianth segment.

Division VII

JONQUILLA NARCISSI Distinguishing characters: Characteristics of any of the Narcissi Jonquilla group clearly evident.

- (a) Cup not less than two-thirds the length of the Perianth segments.
- (b) Cup less than two-thirds the length of the Perianth segments.

Division VIII

TAZETTA NARCISSI Distinguishing characters: Characteristics of any of the *Narcissus Tazetta* group clearly evident.

Division IX

POETICUS NARCISSI Distinguishing characters: Characteristics of any of the *Narcissus poeticus* group without admixture of any other.

Division X

SPECIES AND WILD FORMS AND HYBRIDS. All species and wild, or reputedly wild, forms and hybrids.

Division XI

MISCELLANEOUS NARCISSI. All Narcissi not falling into any of the foregoing Divisions.

The awards made to Daffodils, from the highest downwards, are:

F.C.C.—First Class Certificate.

A.M.-Award of Merit.

P.C.—Preliminary Commendation.

Awards may be qualified in one or more of the following ways:

- (e) as an exhibition flower;
- (c) as a variety for cutting;
- (p) as a variety for cultivation in pots, pans or bowls;
- (f) as a market variety for forcing;
- (m) as a market variety for cutting from the open;
- (g) as a variety for garden decoration;
- (r) as a variety for the rock garden;
- (a) as a variety for the alpine house;
- * award made after trial.

We have also listed the Awards made since the beginning of 1930 by the General Bulb Growers' Society of Haarlem, Holland. Such awards are indicated thus: H. The awards made to Daffodils at Haarlem are:

F.C.C.H.—First Class Certificate.

A.M.H.-Award of Merit.

F.C.F.A.H.—First Class Forcing Award.

E.F.A.H.—Early Forcing Award.

F.A.H.—Forcing Award.

OUTDOOR

CULTURE

Daffodils thrive in any good garden soil, preferably deep well-drained loam. Deep preparation of the soil is necessary, and old rotted manure or compost may be worked in 16 or 18 inches below the surface, so as not to come in direct contact with the bulbs. Fresh manure should never be used.

Plant in the early fall, especially Poeticus types. The more vigorous, larger varieties may be planted as late as December, but early planting is best.

In medium soils, cover the bulbs about twice their depth, and a little deeper in the lighter soils. The average for most sorts is three to four inches from the top of the bulb. Set the bulbs at a uniform depth, otherwise they may flower irregularly.

POT CULTURE

IN POTS OR

BOXES

Daffodils should be potted in September or October in good loamy soil, adding a little sand or leaf mould and a small amount of bone flour. (About two pounds to the bushel of soil.)

The old pots must be washed thoroughly and allowed to dry before using. New pots should be soaked. Provide drainage by placing pieces of charcoal or fragments of pots over the drainage hole. A little ground peat in the bottom regulates drainage, retaining moisture.

After ten or twelve weeks they may be removed indoors for flowering. Select the earliest varieties first, thus extending the flowering season.

Do not bring them into a warm temperature. 50 to 60 degrees is best at first. Do not give any bottom heat. Later when the flower buds are well advanced the temperature may be increased to not more than 65 degrees.

When the pots are first brought to the light, the tender shoots may be covered for a day or two with an inverted flower pot to prevent injury from light or drafts. A little weak liquid manure once a week, until buds burst, will hasten the flowers after growth has started.

Always have plenty of light and air.

MINIATURES

They are charming little subjects for rock work, where their dainty flowers are seen to perfection. They should be left undisturbed for years, and if happy, will soon establish themselves and afford a lovely picture in early spring. All the Bulbocodium (except monophyllus) and the Cyclamineus like moisture, and should therefore be planted at the foot of the rockery. Bulbocodium monophyllus flourishes in a warm dry sheltered situation planted in almost pure sand; when coming into bloom, give water freely. Triandrus albus (Angel's Tears) and Juncifolius delight in partial shade and a light gritty soil and should be given a well-drained position.

We have been very fortunate in obtaining nice stocks of these very scarce and rare daffodils. Most of them had to be collected especially for us in the mountains of Spain and Portugal and on the North Coast of Africa. We are now growing these charming little daffodils from seed and have had very good results.

Daffodils and Narcissi for Naturalizing

NATURALIZING

Daffodils planted in clusters in the foreground of shrubbery, or sown broadcast through woodlands, along hillsides, in meadows or lawns, and planted where they fall, give a most pleasing natural effect. They will increase in beauty and number without special care and become permanently established. In heavy soils the most vigorous varieties should be used. More pleasing effects result from grouping the various types, such as all trumpet types, all Poeticus types, etc.

SEEDLING

MIXTURE

From several acres of daffodil hybrids we select annually not more than thirty or forty plants for further propagation as clones. The remainder we offer as a special seedling mixture. This mixture contains all possible types and combinations that can be achieved. Many of our new pink Leedsii, as well as a large group of Triandrus hybrids, are in this mixture. For garden decoration or for cutting this mixture is unsurpassed. Only limited quantities available.

**per 1000*, \$70.00 and \$56.00*

FLOWER

BORDER

MIXTURE

This mixture is made up from named varieties, especially selected to give an abundant supply of flowers over a very long period. Only varieties that are adapted to naturalizing are selected. We grow several acres of this mixture and add to it, each year, the named varieties that we have tried out and that were found to be not sufficiently outstanding for continued propagation. There are well over a hundred different varieties in this mixture and it should not be confused with the cheap mixtures of old varieties that are frequently offered by other growers.

per 1000, \$60.00 and \$48.00**

RAISERS WHOSE NAMES APPEAR FREQUENTLY IN THIS LIST

BACKHOUSE

Mrs. R. O. Backhouse, born 1857. died 1921. Raised daffodils at Sutton Court, Hereford, 1888-1921.

BARR

Barr & Sons, King Street, Covent Garden, London. Commenced raising daffodils in 1863.

BRODIE

The Brodie of Brodie, Brodie Castle, Fores. Commenced raising daffodils in 1898.

DE GRAAFF

de Graaff Bros., Ltd., Noordwyk, Holland. Commenced raising daffodils in 1872.

ENCLEHEADT

Rev. George Herbert Engleheart, Salisbury. Commenced raising daffodils about 1882.

RICHARDSON

J. Lionel Richardson, Prospect House, Waterford, Ireland. Commenced raising daffodils in 1911.

P. D. WILLIAMS

Percival D. Williams, Cornwall. Commenced raising daffodils in 1895.

G. L. WILSON

Guy L. Wilson, Broughshane, Co. Antrim. Commenced raising daffodils in 1906.

Division

Division

1 Trumpet Daffodils

- a) yellow
- b) bicolor
- c) white
- d) others

2 Large-Cupped Daffodils

- a) yellow, cup colored
- b) white, cup colored
- c) white, cup white
- d) others

- 3 Short-Cupped Daffodils
 - a) yellow, cup colored
 - b) white, cup colored
 - c) white, cup white
 - d) others
- 4 Doubles

5 Triandrus Hybrids

- a) large-cupped
- b) short-cupped

- 6 Cyclamineus Hybrids
 - a) large-cupped
 - b) short-cupped

7 Jonquilla Hybrids

- a) large-cupped
- b) short-cupped
- 8 Tazetta (Bunch-flowered)
- 9 Poeticus
- 10 Species and wild forms
- 11 All others

- 9 ACTAEA (Lubbe 1927 The largest Poeticus in existence. Broad snow-white perianth of great substance and good form; the very large eye is broadly margined with dark red. A most beautiful exhibition flower.

 per 100, \$6.00
- 1c ADA FINCH (de Graaff) 1927—One of the very earliest daffodils to flower. Pure white, overlapping perianth; large, finely shaped trumpet with deeply flanged and rolled rim. The immense flower is carried on a tall, stiff stem and the entire plant is beautifully proportioned. In contrast with many of the British white trumpet daffodils, Ada Finch is pure Ajax and represents the culmination of fifty years of breeding white trumpets. Immensely valuable for breeding as its good characteristics, earliness, size and purity of color are carried over into its seedlings. A.M.H. 1927. F.C. C.H. 1930.

 per 100, \$60.00
- 2b ADLER (de Graaff) 1929 A universal favorite both among exhibitors and amateurs; a really marvelous flower with perianth of the purest white, overlapping and opening nearly flat, circular in outline and 4 inches across, with a beautifully proportioned cup of pure chrome yellow, shading to blood-orange at the deeply frilled edge; the most admired flower in many large collections. A.M. 1928, A.M.H. 1928. per 100, \$12.00
- la AEROLITE (de Graaff) 1923—Here is a golden daffodil that is replacing many of the present varieties as it becomes available; the large flower is beautifully proportioned, giving the impression of gracefulness, despite its size; perianth deep primrose, with a pure medium yellow trumpet which is left in bold relief by the broad pointed star formed by the flat opening outer petals, an inch and a half wide; medium early, but remains until late, and is one of the longest lasting of all daffodils either in the garden or after being cut.

per 100, \$7.00

2a ALAMEIN (Rich.) 1944—A lovely flower of the highest quality, with beautifully smooth, broad, flat clear golden yellow perianth segments, very slightly pointed at the tips, and a rather straight well-frilled medium-sized cup of intense deep solid orange-red. Tall, strong-stemmed, vigorous plant. A.M.(e) 1945.

each, \$20.00

la ALASKA (de Graaff) 1928—Giant flower of deepest gold; more graceful than most of the giant Ajax varieties as the trumpet is deeply frilled and recurved. This variety has been thoroughly tested in the greenhouse and on the Eastern cutflower markets and shows ususual promise as a future florist's flower. Excellent for pots.

per 100, \$8.00

- 1a ALASNAM (de Graaff) 1923—Wide, short, densely frilled trumpet of pure deep yellow, a shade deeper than the perianth; finely placed with good neck; flower "looks you in the eye"; excellent for landscape groups, also for forcing; very early and therefore in great demand by discriminating florists who want something earlier and better than King Alfred. per 100, \$8.00
- 10 ALBUS PLENUS ODORATUS (Poeticus flore pleno)
 —Snowy white, sweet-scented, highly recommended, pure white double Poeticus. Flowers satisfactorily only in cool, moist climate:

 per 100, \$6.00
- 3a ALCIDA (Backhouse) 1923—Giant flower, creamy perianth opening flat, star-shaped, with individual petals over 1½ inches wide; broad citron-yellow cup with blood-orange frill; strong grower, fine substance and wonderfully free-flowering; very late. A.M.H. 1921.
- 8 ANNA BRITA (de Graaff) 1941—A very beautiful Poetaz of outstanding quality. Pure white perianth of heavy texture and well overlapping; bright red crowns, nicely crinkled. A.M.H. 1942.

 each, \$1.00
- 2b ANZIO (Rich.) 1945—A brilliant large flower, bred from Clava x Hades, with very rounded, overlapping pure white perianth and a large bowl-shaped cup of intense solid deep orange-red, making a striking contrast in colors.

 each, \$2.00
- 1b APRICOT (de Graaff) 1898—The first of the bufftinged trumpet daffodils raised by de Graaff. A sensational flower when first introduced, it is, of course, now far surpassed by many other varieties and is of historical interest only. A.M. 1898.

 N.F.S.
- 2b ASMODE (de Graaff) 1930—Very large flaring cup of deep yellow with distinct orange margin; petals pure white, well rounded and overlapping. Large flower, fully 4 inches across. A particularly fine show-flower. A.M.H. 1930.

 per 100, \$16.00
- 2a BACKHOUSE'S GIANT (Backhouse) 1936—Finely proportioned, deep golden yellow star-shaped perianth. Cup narrow and long, almost of trumpet daffodil proportions and colored deepest orange-red. This is the closest thing to a red trumpet daffodil and should have great value in breeding. A.M.H. 1948.

 each \$6.00
- 3a BATH'S FLAME (Bath) 1914—Yellow perianth with darker cup, deeply edged orange-scarlet. A.M. 1915. per 100, \$6.00

- 1c BEERSHEBA (Engleheart) 1923 A magnificent flower, large, perfectly flat perianth, trumpet long and beautifully flanged at mouth. A flower of great size, measuring nearly five inches across; a vigorous grower and a grand exhibition variety F.C.C., R.H.S. 1926, A.M.(e) 1925, F.C.C.(e) 1926 A.M.(c) 1929.

 per 100, \$30.00
- 1a BEN HUR (de Graaff) 1927—A glorious "loud speaker" trumpet, deeply frilled of pure Roman gold, 2½ inches across at the mouth; in spite of its immense size the whole flower is finely proportioned, one of the best of the new trumpets. A.M.H. 1930. per 100, \$12.00
- 2a BENGHAZI (Rich.) 1941—A striking large flower, with rich bright yellow rounded flat perianth and a very large, almost flat crown, heavily banded bright orange-red shading to gold in the center. Tall, strong, very free grower.

 each, \$6.00
- 2b BERNARDINO (Worsley) 1907—Perianth creamy white, cup yellow edged orange, very free-flowering, good grower, recommended.

 per 100, \$6.00
- 6b BERYL (Williams) 1906—A lovely little Cyclamineous hybrid bearing graceful drooping flowers with primrose-yellow, slightly reflexing, perianth and small globular bright orange cup shading to gold; ideal for the rock garden and pots, height 8 inches. A.M. 1936.

 per 100, \$10.00
- 3b BRIDEGROOM (Brodie) Calvert 1927, A.M. (e) 1929—Large flower, creamy-perianth, yellow crown, narrow edging of orange, good substance, very late and of great value for exhibition and cutting. per 100, \$60.00
- 1c BROUGSHANE (Wilson) 1938—A glorious giant white Ajax of perfect form and balance. The trumpet is widely flanged, reflexed and frilled but does not overbalance the immense perianth, which is fully 5½ inches in diameter, the outer segments being up to 2¼ inches wide. The great flower, which is of immense substance and is quite exceptionally durable, is carried on a strong stem well over two feet high, while the foliage measures as much as 1¾ inches in breadth. Plant of immense vigor. A.M. 1943, A.M.H. 1948. each \$16.00
- 2b BRUNSWICK (Williams) 1934—Flower of good form, balance and proportion, well posed on a tall strong graceful stem. Well modelled flat clean-cut cold white perianth of very firm texture and a perfectly balanced crown that is nicely-flanged and frilled. Clear icy white in the base, gradually shading up to sharp very green lemon at brim. Extraordinary lasting power. F.C.C. 1939.

 per 100, \$50.00
 - BULBOCODIUM—The Hoop Petticoat or Medusa's Trumpet daffodil. For the rock garden, edgings and small beds, these beautiful little daffodils are most charming, while if several bulbs are planted in pots or pans they are greatly prized for indoor decoration.
- 10 BULBOCODIUM CITRINUS—The large sulphur Hoop Petticoat. Very beautiful pale citron flowers, height 6 to 8 inches; delights in a damp sandy peat soil; no manure should be given.

 per 100, \$20.00

- 10 BULBOCODIUM CONSPICUUS—The yellow Hoop Petticoat, flowers rich golden yellow, of hoop-petticoat form and rush-like foliage. Height 6 inches. It blooms from the end of February to early in March, and prefers a sandy peat soil with a fair amount of moisture while in growth, but not in summer; no manure should be given.

 per 100, \$4.00
- 10 BULBOCODIUM MONOPHYLLUS or Clusii, the white Hoop Petticoat, native of N. Africa, producing in winter little snowy white flowers of exquisite beauty; charming in the rock garden or may be grown in pots in a cold frame or cool room; as soon as signs of growth are seen give water freely, height 6 inches. On no account should manure be given.

 N.F.S.
- 2d BINKIE (Tasmanian)—Rare new color break, the perianth being pronounced lemon-yellow, the large, flaring cup a pale lemon, bleaching to almost pure ivory. Good grower, attractive garden and show plant, highly recommended.

 each, \$5.00
- 1b BONINGTON (Radcliff) 1936—Attractive bicolor trumpet, pure white glistening petals, cup deep canary yellow. An entirely different type of bicolor trumpet daffodill than Spring Glory, Queen of Bicolors, etc. Good show flower.

 each, \$2.00
- 2a CALIFORNIA GOLD (Barr) 1940—The outstanding yellow Incomparabilis in our 1945 trials. Perianth very smooth and circular, of deepest gold, well proportioned deep rich orange-red cup. Strong grower with very stiff stems, excellent form and habit. Flowers shortnecked and carried well above the foliage. In our opinion the very best of the many yellow-red flowers introduced in England. Holds its color well and should prove invaluable for breeding.

 each, \$12.00
- 10 CANALICULATUS—A dainty little Polyanthus Narcissus from Mentone, suitable for sunny situations in the rock garden; it has narrow erect bluish green foliage and bears heads of three to four flowers with white perianth and globular golden cup, sweetly scented; height 6 in.

 per 100, \$4.00
- 2a CARBINEER (A. M. Wilson) 1937—A magnificient flower of splendid carriage and great substance. Broad flat golden-yellow perianth standing at right angles to the large bright orange-red cup. F.C.C. 1938, A.M. 1931.
- 2a CARLTON (Williams) 1927—A fine clear yellow self-color of great size. Flat overlapping perianth and large expanded crown frilled at brim, a magnificent plant of great vigor. A.M. (g) 1936, F.C.C. (g) 1939.
- 2c CARNLOUGH (G. L. Wilson) 1934—A distinct giant of strong, sturdy habit, fine size and suberb quality. Broad firm flat pure white perianth; on first opening the crown is faintest citron with a frill of soft coral pink. In time the entire flower passes to purest white throughout; it is exceptionally durable. each, \$1.00
- 3b CARPATICA (Rich.) 1945—A lovely flower of medium size, after the style of Matapan, but slightly larger; bred from the same cross (Coronach x Forfar), with broad, rounded flat white perianth and an almost flat crinkled crown of bright brick-red.

 each, \$3.00

KEY

1 Trumpet Daffodils

- a) yellow
- b) bicolor
- c) white
- d) others

2 Large-Cupped Daffodils

- a) yellow, cup colored
- b) white, cup colored
- c) white, cup white
- d) others

Division

3 Short-Cupped Daffodils

- a) yellow, cup colored
- b) white, cup colored
- c) white, cup white
- d) others

4 Doubles

5 Triandrus Hybrids

- a) large-cupped
- b) short-cupped

Division

6 Cyclamineus Hybrids

- a) large-cupped
- b) short-cupped

7 Jonquilla Hybrids

- a) large-cupped
- b) short-cupped
- 8 Tazetta (Bunch-flowered)
- 9 Poeticus
- 10 Species and wild forms
- 11 All others

- 3b CHARMANT (de Graaff) 1944—A well-rounded, substantial flower carried on a tall stiff stem. Perianth purest white, crown a bright scarlet-red. each, \$1.20
- 4 CHEERFULNESS (Van der Schoot) 1923—The double Elvira, a very pleasing double white Poetaz, good stems, a fine garden and show flower. F.C.C. 1939, A.M. (e) 1926, A.M. (g) 1935. per 100, \$5.00
- 2a CHEERIO (Brodie) 1932—Fine, colorful garden variety of merit. The immensely broad, quite circular, soft yellow perianth has great substance. The widely expanded, frilled, bowl-shaped crown is a bright orange-red. Tall, vigorous and a good increaser. A.M. (g) 1941.

 per 100, \$30.00
- 7b CHEYENNE (Powell) 1946—A white Jonquil hybrid, 2 inches in diameter, bearing two or three flowers on a twelve inch stem. Broad, pointed and well-overlapping petals; beautifully flared ivory cup three-fourths inch in diameter, with crinkled edge. An American introduction of real merit.

 per 100, \$10.00
- 1c CHINA CLAY (Brodie-Calvert) 1928—In our opinion one of the prettiest pure white daffodils. The entire flower is glistening white, the perianth is star-shaped and the trumpet is rather narrow, nicely frilled at the rim. The foliage is greenish-blue. An extraordinary flower for cutting and for corsages but equally fine for garden decoration. A large bowl of China Clay, interspersed with flowers of Mrs. R. O. Backhouse, the pink daffodil, is a sight never to be forgotten. per 100, \$75.00
- 3c CHINESE WHITE (Guy L. Wilson) 1937—A very large flower of quite faultless form and quality; absolutely pure white throughout except for a faint touch of green in the eye; very broad circular satin-smooth perianth of great substance fully 4½ inches in diameter. Perfectly proportioned shallow fluted saucer cup. A superb show flower and quite unique. This is the first really flat crowned Leedsii and should be extremely valuable for breeding. A.M. 1946, F.C.C. 1949.
- 3a CHUNKING (Wilson) 1942—Large, tall stemmed circular flower having a very broad smooth clear golden perianth and intense deep vivid red shallow crown. A.M.H. 1948.
- 2b CLAIRETTE (de Graaff) 1938—Very flat, silvery white perianth of fine proportions, broad, trumpet-like crown of purest creamy white coloring. This is one of the finest Giant Leedsii raised in Holland. A.M.H. 1938.

 each, \$1.00

- 2b CONBEG (Wilson) 1944—About the first red and white flower of true Incomparabilis form, in which the perianth can be said to have attained real Poeticus white. The cup is deep red and goblet shaped.
 - each, \$3.00
- 1b CONTENT (Will., P.D.) 1927—A beautiful large, tall, early bicolor of splendid form and carriage. The color is the much sought-after lemon-green, bleaching to ivory. Petals are extremely broad at base and overlap greatly. A.M. (e) 1940.

 each, \$3.00
- 2b CORALIE (Australian)—A very pretty short-cupped pink daffodil, sent to us by Alister Clark. The petals are pure white and rather pointed, the short cup is of a soft rose-pink color, flaring and frilled. Fine exhibition flower and good pollen parent.

 each, \$4.00
- 1c CORINTH (Brodie) 1928—An immense flower, very stiff substance, fine broad, flat white perianth, standing at right angles to the bold ivory trumpet. each \$1.20
- 2b COVERACK PERFECTION (Brodie) Calvert 1930, A.M. 1934—Broad, white perianth, with large shallow saucer crown, edged and flushed with pale salmongold, striking.
- 2a CROESUS (Will.) 1912—Universally popular both for the garden and for exhibition; light canary-yellow perianth of perfect form, with outer petals nearly touching, the inner ones overlapping, opening flat; broad fluted cup of rich orange to base; substantial, free-flowering, and a fine propagator; desirable in every way. F.C.C. 1912, A.M. (g) 1914. per 100, \$6.00
- CYCLAMINEUS (Baker) 1887-The yellow cyclamen-flowered daffodil. This beautiful little daffodil was found by the late Mr. Peter Barr in Spain and Portugal, at the margin of mountain streams and in flooded meadows adjoining; the moister the situation, the finer were the blooms. It is the earliest of all daffodils, flowering from the middle of February to early March and is a charming, elegant little flower of very distinct form. The trumpet is rich yellow, straight and tubelike, elegantly serrated at mouth, while the perianth is reflexed like a cyclamen. A valuable little species for pot culture, edgings, and to naturalize in damp spots in the rock garden, in grass and in shady nooks, or at the water's edge; it delights in a dampish sandy peat soil and should be left undisturbed for years. Height 6 inches. F.C.C. 1887.
- 9 DACTYL (Engle.) 1923—A.M.H. 1929, A.M. (e) 1931. Very large and beautifully clean-cut perianth of mathematical evenness and extraordinary solid, smooth substance. Large broad, flat citron eye edged with a boldly defined rim of deep red. Lovely for cutting. per 100, \$20.00

- 2b DAISY SCHAFFER (de Graaff) 1925—One of the best of the remarkable new Giant Leedsii type; the flower 4½ inches across, with cup nearly 2 inches resembles a Giant Trumpet, but much more graceful in form; perianth pure white, with cup opening primrose and turning to light canary-yellow, deeper at the base; long, lemon-yellow stigma and styles add to the color harmony of this remarkable flower; undoubtedly a leader for years to come. A.M. 1925, F.C.C. 1929, F.C. C. 1933, Gold Medal 1935 H. per 100, \$20.00
- 2a DAMSON (Williams) 1935—A striking flower of very brilliant color and fine substance, broad creamy white perianth shaded yellow at base, long cup of an intense deep fuchsia-red. A.M. (e) 1925, A.M.H. 1930 per 100, \$8.00
- 4 DAPHNE (Culpin) 1914—The most promising novelty of this division, pure white, sweet scented, large double flowers, early forcer. A.M. (m.e.) 1913, F.C.C. (c) 1924, A.M.H. 1928. F.C.C.H. 1929. per 100, \$10.00
- 1a DAWSON CITY (van Tubergen) 1925—A fine garden variety of excellent quality and of value for exhibition. Broad flat perianth of smooth substance, wellformed flanged trumpet, of a self golden-yellow. A.M. (e) 1925, A.M. (g) 1930.
- 2b DEANNE DURBIN (de Graaff) 1938—Purest white, flat perianth. Segments extremely broad and well overlapping. The well proportioned cup is of a uniform vivid orange coloring and nicely frilled at edge. A tall, sturdy plant, very free-flowering and extremely good forcer. A.M.H. 1938.

 per 100, \$20.00
- 2b DELAWARE (de Graaff) 1927—Somewhat similar to Daisy Schaffer, but smaller throughout, and if possible even more gracefully formed; strong grower and very free-flowering; cup opens a golden quince color, changing to creamy lemon, exceptionally deep crinkled; a splendid flower, nicely scented.

 per 100, \$12.00
- 3a DIANA KASNER (Backhouse) 1924—A cream-yellow perianth and a large fluted yellow cup with blood-red frill, very free-flowing and an excellent forcer. We consider this variety as one of our most valuable introductions and cannot recommend it too highly for show purposes.

 per 100, \$6.00
- One of our finest introductions, very strong grower and exceptionally free-flowering. The perianth is pure white and the cup flame orange. One of its most remarkable qualities is that the color does not fade but rather intensifies with age. The flower lasts unusually long and we believe that this variety will be of the greatest value both for greenhouse work or for outside. Its great beauty lies in the startling contrast between petals and cup which makes it stand out in the largest collection of daffodils. A worthy companion to Francisca Drake. A. M.H. 1931.

- la DIOTIMA (de Graaff) 1927—Considered by many experts as the very best of the new super-giant yellow trumpets; despite its huge size (perianth being five to six inches across) the whole flower is beautifully proportioned and is carried gracefully on flattened tapering stems, two feet tall, entirely free from the amaryllis-like stiffness of many of the giant trumpets; the broad overlapping petals form a star-shaped perianth of medium deep primrose, trumpet somewhat more deeply colored; undoubtedly one of the top-notchers for many years to come.

 per 100, \$40.00
- 3c DISTINGUE (Backhouse) 1923—Large, perianth is wide-spread, pure white color, smooth texture, cup is tinged with pale lemon.

 per 100, \$80.00
- 9 DULCIMER (Engleheart) 1913—One of the finest Poets, broad snow-white perianth, good substance and form, large eye is broadly margined with dark red, very tall and very late. A.M. (g.c.) 1923. per 100, \$6.00
- 2a DUNKELD (Brodie) 1935—Broad smooth circular clear yellow perianth of great substance, shallow expanded cup of solid vivid orange-scarlet. Very vigorous and free-flowering—a magnificent flower that should have high value for cutting and exhibition. each, \$1.00
- 3b ECLAIR (Backhouse) 1929—Semi-Poeticus type with broad overlapping perianth of purest white; and shallow cup yellow at base shaded to deep blood-red; unique flower of unusual substance; very late.

 per 100, \$20.00
- 3b EDITH (Backhouse) 1928—One of the best of the new Poeticus type exceptionally wide perianth petals and fine form; very late. A.M. 1928. per 100, \$16.00
- 2b E. H. WILSON (de Graaff)—Of most lovely form and perfect texture, broad overlapping pure white perianth but distinctly star-shaped as petals are nicely pointed. Crown light yellow but passing to ivory, shallow and fluted at margin. A fine, tall garden plant of unusual substance and great merit. The flowers last unusually well and are magnificent for show purpose as well as for home decoration. A.M. 1936.

 per 100, \$10.00
- 1b ESKIMO (Brodie) 1927—A well built flower of great substance and very lasting, broad perianth standing at right angles to the open-mouthed trumpet which is pale primrose on first opening, the whole flower passing to an intensely pure white. Increases freely, very vigorous, blooms profusely. A most beautiful garden plant.

 per 100, \$32.00
- 4 FALAISE (Rich.) 1945—A quite unique double, raised from Mary Copeland. The pollen parent must have been a Poeticus as the petals are of purest white and the flower has the true Poeticus scent. The center is bright orange-red which makes a striking contrast against the rather long pure white inner petals. A lightly built flower on tall, wire stems, very late.
- 2b FANNIE CURREY (Richardson) 1935—A.M. (e) 1929—Perianth white, perfectly flat and overlapping, cup is large, expanded and frilled at mouth, beautiful shade shell-pink gradually shading to pale lemon at base of cup.

 each, \$1.80

KEY

1 Trumpet Daffodils

- a) yellow
- b) bicolor
- c) white
- d) others

2 Large-Cupped Daffodils

- a) yellow, cup colored
- b) white, cup colored
- c) white, cup white
- d) others

Division

3 Short-Cupped Daffodils

- a) yellow, cup colored
- b) white, cup colored
- c) white, cup white
- d) others

4 Doubles

5 Triandrus Hybrids

- a) large-cupped
- b) short-cupped

Division

6 Cyclamineus Hybrids

- a) large-cupped
- b) short-cupped

7 Jonquilla Hybrids

- a) large-cupped
- b) short-cupped
- 8 Tazetta (Bunch-flowered)
- 9 Poeticus
- 10 Species and wild forms
- 11 All others

- 6a FEBRUARY GOLD (de Graaff) 1923, A.M. 1928—A little known, extremely early blooming, small golden daffodil. The perianth is rather star-shaped, the nicely fluted, straight trumpet is tinged with orange. A hybrid between N. cyclamineus and a trumpet daffodil, it has retained all the earliness of its parents and forces extremely well. Start a few bulbs in pebbles and water in November, keep bowls or pans in a dark, cool place for three weeks and then bring into light. Or, plant from three to six bulbs in a pot in October and keep pot in a cool, dark place, watering as needed. They will easily bloom by Christmas. February Gold is one of our own introductions.

 per 100, \$7.50
- 2c FEDORA (de Graaff) 1942—Very large, flat and over-lapping creamy white perianth. Crown deeply imbricated and frilled, uniform orange-yellow except for a deeper well defined margin. A most refined flower of great strength. A.M.H. 1943. per 100, \$24.00
- 3b FIREBIRD (de Graaff) 1938, A.M.H. 1940—A large, well proportioned flower with white perianth of pure white, rounded and overlapping petals. The short cup is nicely frilled and is of a orange-red color.

each, \$1.00

- 3c FIRETAIL (Crosfield) 1910—Deservedly popular the world over; broad petalled creamy-white perianth and large orange cup with scarlet-orange frill. F.C.C.H. 1925.

 per 100, \$12.00
- 2a FORTUNE (Ware) 1923—Broad creamy yellow perianth of very solid texture, crown of great size and elegant form, opening at mouth and beautifully frilled, or a glowing soft orange. A Giant Incomparabilis of perfect form, early a strong grower. Undoubtedly will soon become one of the more popular varieties. F.C.C. 1924 (e.g.c).

 per 100, \$12.00
- 2a FORTUNE'S BLAZE (Brodie) Calvert 1930—Not large, but both the yellow of the perianth and the red of the cup are exceptionally bright and intense.

 per 100. \$60.00
- 2a FORTUNE'S BOWL (Brodie) Calvert 1930—A good yellow perianth and deep red cup. A.M. (m) 1940, the finest of the Fortune seedlings.

 each, \$1.00
- 2a FORTUNE'S CHAMPION (Brodie) Calvert 1930— Outstanding flower, tall, vigorous, remarkable feature is color of cup which is solid deep red, extending right down to the base. per 100, \$80.00
- 2a FORTUNE'S CREST (Brodie) A.M. (e) 1931—Good yellow perianth and deepest solid red cup of any flower yet raised from Fortune.

 each, \$1.40

- 2b FRANCISCA DRAKE (Backhouse) 1926—Impossible to describe adequately the beauty of this unusual flower of a distinct new type; the pure white perianth petals are of unusual substance, an inch and a half wide, and tinted gold at the base, which shows through on the outside; the cup, wide and deep, is golden yellow at the base, changing gradually to flame orange at the densely frilled edge; the flowers are held well above the fine foliage and give the effect of a flock of white seagulls taking flight; strong-growing and very free-flowering. A.M. 1926.

 per 100, \$7.00
- 2a GALWAY (Rich.) 1943—A.M. (e) 1942, A.M.H. 1948, F.C.C. (e) 1948—A glorious tall strong-stemmed intense self-golden flower, bordering on true trumpet daffodil proportions; broad smooth perianth, well flanged trumpet crown. Splendid size, build, proportion, stature and color; a magnificent garden plant and a grand show flower.

 each, \$6.00
- 3b GARDEN OFFICER (Lefeb.) 1938—An attractive short-cupped daffodil which stands out for its perfect form and habit. One of the rare short-cupped daffodils that really looks up. The perianth is of a soft ivory, the cup which is nicely frilled has a yellow center and a narrow red edge. Not a spectacular show flower, but one that deserves and merits your attention.

 per 100, \$20.00
- 6a GARDEN PRINCESS (de Graaff) 1928—Uniform darkest golden yellow flower with better form and substance than February Gold. Very early forcer and most attractive in the border or in pots. Fine for exhibition. A.M.H. 1939.
- 8 GERANIUM (v.d. S.)—A.M.H. 1931—One of the newer Dutch Tazetta Hybrids with from five to seven large flowers per stem. The petals are rounded and overlap, the short, flat red crown is orange-red. A good variety for late forcing in pots and pans but equally outstanding in the garden and for exhibitions. per 100, \$6.00
- 2c GERTIE MILLAR (de Graaff) 1927—Wonderful flower of the new Giant Leedsii type with pure white perianth similar to and as large as Van Waveren's Giant, with beautifully proportioned pale primrose cup deeply fluted and frilled and of translucent texture; unusually long pistils and anthers match these colors perfectly; a most handsome flower. A.M.H. 1930. per 100, \$16.00
- 8 GLORIOUS (Williams) 1923—Tall, flower delightfully informal in habit, perianth Poeticus white with eye orange, edged red; good for semi-shade; very early and an excellent forcer. F.C.C. 1927, A.M. (c.g.) 1923, F.C.C. (m) 1926, A.M. (g) 1928. per 100, \$6.00

- 1a GLORY OF LEIDEN (de Graaff) 1887, F.C.C. 1887—
 A variety which now has historical value only but which was once famous. As late as 1910 the Rev. Joseph Jacob wrote about it as follows: "the trumpet is deep yellow, bold and striking, the perianth being streaky is not loved by florists but with the average grower this variety is always singled out as one of his best." We grow a few bulbs only for sentimental reasons and do not offer it for sale.

 N.F.S.
- 9 GLORY OF LISSE (Segers) 1907—White perianth, yellow cup, edged red. per 100, \$6.00
- 1a GOLDEN HARVEST (Warnaar) 1927, E.F.A.H. 1928
 —Undoubtedly one of the largest trumpet varieties in existence. The perianth is well formed and overlapping; the trumpet is of good shape and proportion, rolled back at the brim. The color is deep golden-yellow. Opens before Golden Spur.

 per 100, \$11.00
- 2a GOLDEN PEDESTAL (Rich.) 1922—A remarkably fine flower of good form and quality. The perianth is a clear golden yellow, made up out of broad and overlaping petals and measuring better than four inches across, of wonderful substance, retaining its form till the last. The cup is beautifully proportioned, of the same color as the perianth, nicely frilled and expanded. The plant is tall, a very strong grower and a rapid increaser and free bloomer. In many trials it has stood out as one of the finest garden daffodils. A.M. (e) 1922.

per 100, \$10.00

- 7c GOLDEN PERFECTION (de Graaff) 1927—A perfect perianth with wide overlapping segments, deep citron-yellow with mica sheen and cup of pure gold perfectly proportioned to balance of flower; calyx greygreen flecked with gold; unique in its class. F.C.C. 1926, A.M. (g) 1934.

 per 100, \$8.00
- 7a GOLDEN SCEPTRE (de Graaff) 1913—A hybrid of Monarch crossed with a single Jonquil. A medium-sized perfectly built flower of true jonquil yellow. The perianth is star-shaped, just a shade lighter than the trumpet which is slightly rolled and flaring at the mouth. F.C.C. (g) 1936.

 per 100, \$6.00
- 2b GOLDONA (de Graaff) 1930—Comparatively short yellow cup with well defined orange-red frill. Starshaped perianth. An informal flower of pleasing appearance.

 per 100, \$40.00
- 3b GRAND OPERA (Chapman) 1929—One of the border-line Poeticus types, small but very attractive and free flowering. The neat perfectly rounded perianth is in strong contrast to the red crinkled cup.

 per 100, \$20.00
- la GRAPEFRUIT (Lubbe) 1929, F.C.C.H. 1944—One of the outstanding new daffodils of novel coloring. The large, well proportioned flower is of a cool uniform lemon-green color, bleaching to almost true ivory with age. Has unusual lasting power and while it opens early it will stay in good condition for weeks. We have found that the plant grows best when left undisturbed for two or three years which gives it added value as a fine garden variety.

 each, \$5.00

2b GRATIA (de Graaff) 1938—A fine example of the large, star-shaped Leedsii. Petals purest white; crown soft yellow with white margin. A.M.H. 1938.

per 100, \$16.00

- 2b GRAYLING (Will.) 1927—A grand Leedsii of most distinct character and largest size, having very broad and much overlapping white perianth which stands well at right angles to the rather narrow and fluted pale primrose crown. A.M. (g) 1931. per 100, \$80.00
- 2b GREEN ISLAND (Rich.) 1940—A sensational flower of very large size, great substance and waxen smooth texture. Smooth rounded white segments of such immense width that they form an almost complete circle. Well proportioned shallow bowl-shaped frilled cup, greenish white at base, inside passing to white, which in turn passes to a band of clear, cool, greenish lemon at the margin. Short-necked on a tall, long stem. Plant of great vigor. P.C., 1940. Best flower in London Show 1940.
- 2b HADES (Backhouse) 1925—A flower of wonderful color, large creamy white perianth of excellent substance, large expanded crown of a real deep cherryred, height 24 inches; a very strong, vigorous variety which holds its color exceptionally well. A.M. (e) 1928.

 **per 100, \$20.00
- 1b HALFA (Brodie) 1927—A very attractive flower of high quality, broad perfectly flat even and smooth overlapping white perianth, clean cut and pointed. The soft yellow trumpet has an evenly flanged brim. each, \$1.20
- 2a HAVELOCK (Williams) A.M. (e) 1927, A.M.H. 1930, A.M. (c) 1931, A.M. Wisely 1935—Bright self-yellow, wide and even perianth segments finely proportion, good quality and stem. per 100, \$8.00
- 1a HECTOR TREUB (de Graaff) 1923—Uniform golden yellow, a very early forcer. Most beautiful proportions, the petals are overlapping and the flower is well balanced. A most distinct improvement over King Alfred. per 100, \$7.00
- 2a HELIOS (Engleheart) 1912—Deep golden yellow perianth semi-overlapping; the cup opens a little darker than the petals and in a cool climate gradually changes to light orange. A.M. 1912.

 per 100, \$6.00
- 1a HENDRIK IBSEN (de Graaff) 1927—A real "golden daffodil" which will apeal strongly to those who do not insist upon size above everything else; a pure self color, and of much more graceful conformation than most of the larger yellow trumpets, with the flower held well above the foliage; very free flowering and very early.
 per 100, \$7.50
- 2c HERA (De Graaff) 1914—Broad-petaled creamy white perianth, star-shaped and deeply frilled cup of creamy white with a dainty edging of light primrose; one of the most chastely beautiful of all daffodils. A.M. 1915, A.M. (g) 1936.
 per 100, \$6.00

KEY

1 Trumpet Daffodils

- a) yellow
- b) bicolor
- c) white
- d) others

2 Large-Cupped Daffodils

- a) yellow, cup colored
- b) white, cup colored
- c) white, cup white
- d) others

Division

3 Short-Cupped Daffodils

- a) yellow, cup colored
- b) white, cup colored
- c) white, cup white
- d) others

4 Doubles

5 Triandrus Hybrids

- a) large-cupped
- b) short-cupped

Division

6 Cyclamineus Hybrids

- a) large-cupped
- b) short-cupped

7 Jonquilla Hybrids

- a) large-cupped
- b) short-cupped
- 8 Tazetta (Bunch-flowered)
- 9 Poeticus
- 10 Species and wild forms
- 11 All others

- 1a HUNTER'S MOON (Brodie 1943)—Bred from Brimstone by Moongold. A perfectly lovely trumpet arrayed in graded tints of clear shining luminous lemon, perhaps most intense at the outer edge of the beautifully flanged and serrated trumpet and paler at the edge of the petals. Grand flower for cutting. Vigorous and free blooming; extraordinarily durable and a most beautiful garden plant. A.M. 1943.

 each, \$3.00
- 4 INDIAN CHIEF (Backhouse) 1927—Very large and very double, bright yellow interpersed with orange; the petals curled and twisted.

 per 100, \$8.00
- 4 IRENE COPELAND (Copeland) 1923—Large full double snow-white flowers with primrose markings; a lovely and distinct variety with strong rigid stems. A. M. 1925. per 100, \$20.00
- 2b JEAN HOOD (West & Fell) 1935—An exhibition variety bearing large, well proportioned flowers on very tall and stiff stems. The perianth is smooth and well rounded, pure white in color, the cup or crown is yellow with a darker margin. This variety is of real value in breeding and while its color could be improved, its stature, size and proportion are flawless.

per 100, \$80.00

- 1b JEFTA (de Graaff) 1927—Very delicately colored giant trumpet of moderate size; cream colored perianth and pale lemon trumpet slightly recurved at mouth; King Alfred seedling; early. per 100, \$12.00
- 2b JOHN EVELYN (Copeland) 1920—Deservedly an international favorite; outstanding among the new Incomparabilis hybrids; flatly opening perianth, 4 to 5 inches across, with a flat cup nearly 2 inches in diameter, densely frilled, the perianth being pure white, without a trace of shading, and the cup lemon-yellow and fluted or shirred to the base; good neck; strong grower; free-flowering and a good propagator; one of the greatest daffodils of the present day and for years to come. F.C.C. 1924.

 per 100, \$11.00
- 10 JONQUILLA SIMPLEX—The true single sweet jonquil, of light elegant growth, bearing out of doors in May charming clusters of numerous small rich yellow flowers of delicious scent. per 100, \$4.00
- 10 JONQUILLA FLORE PLENO—The true old double sweet jonquil, produces in May little heads of rich yellow double flowers, very fragrant and attarctive for cutting.

 per 100, \$5.00
- 10 JUNCIFOLIUS—The miniature rush-leaved daffodil, a charming and elegant species for pots or select spots in the rock garden; it has small rich yellow flowers rather smaller than a jonquil with a dainty little flattish crown, height 3 to 4 inches, delicately fragrant; a native of the Pyrenees.

 per 100, \$6.00

- 1a KANDAHAR (Brodie) 1927—A gorgeous and most striking giant trumpet of immense size, great substance, and pure deep solid self gold color; immense vase shaped trumpet and wide spread perianth, very tall and strong.
 each, \$1.00
- 9 KENTUCKY (de Graaff) 1928—A most unusual break in coloring gave us this Poeticus with brownish-pink petals. The color soon fades and for exhibition it should be picked while in bud and allowed to open in full shade or indoors. The flat, chrinkled cup is crimson-red.

per 100, \$50.00

- 2c KILLALOE (Rich.) 1940—One of the most striking Giant Leedsii, an immense pure white flower of grand quality, well over 5½ inches across. The perianth segments are shovel-pointed, very broad, flat and of fine substance. The large cup is widely expanded, beautifully flanged and frilled at the mouth. A fine plant with strong stem and very broad foliage. P.C., R.H.S. 1940. each, \$1.40
- 1a KING ALFRED (Kendall) 1899—F.C.C. 1899—The most popular daffodil in the world and one that even today holds its own against all comers in every flower market. Because of its large size, its golden yellow color and its informal, pleasing shape it has become the universal favorite and is sold in larger quantities than any other daffodil. per 100, \$7.00
- 8 KLONDIKE. (Van der Schoot) 1907—Rich yellow perianth, darker cup, one of the finest yellows.

per 100, \$6.00

2a KRAKATOA (Rich.) 1945—Quite the most outstanding novelty imported by us during the past few years and probably the finest new daffodil introduced since Fortune, which was one of its parents, appeared twenty-five years ago. On the few occasions that is has been exhibited it has created a sensation. An immense flower with broad overlapping deep golden yellow perianth of fine substance and quality; the very widely expanded cup is bright flaming orange-red, beautifully flanged at the mouth. Flowers are short-necked, well posed on strong, stiff stems; fine robust plant; flowers and increases very freely. A.M. 1945, F.C.C. 1943.

each, \$6.00

3b LADY DIANA MANNERS (Back.) 1925—Creamy white perianth, large red cup, flowers finest shape and tall stems. A.M. 1925. per 100, \$10.00

3b LADY KESTEVEN (Backhouse-de Graaff) 1933-This is undoubtedly one of the very finest Barriis introduced by us. Words fail to describe this wonderful daffodil adequately. Suffice it to say that the perianth is pure white, well formed and substantial and that the cup is of the very deepest red ever seen in a daffodil. We are proud of the fact that we can introduce this beautiful daffodil to the United States, and though as yet it is too expensive to be forced for shows, we hope in a few years to be able to distribute it more freely. We believe that this is one of the most promising Barriis for hybridizing purposes, especially since the color does not seem to fade in the sun. A.M.H. 1931.

per 100, \$30.00

- 3b LADY LILFORD (Back.) 1927—Very striking flower with a broad overlapping white perianth of great substance and quality with a large eye with wide margin of deep red. per 100, \$60.00
- 7b LANARTH (Williams) 1907-A beautiful and unique hybrid, deep golden overlapping perianth, shallow expanded cup, old gold flushed orange; a fine exhibition flower and garden plant. F.C.C. 1936. per 100, \$6.00
- 2b LA TENDRESSE (van Leeu.) 1931-Perianth white, flat and overlapping, large ivory cup frilled at mouth, shell-pink at edge of cup shading to pale ivory at base per 100, \$40.00 of cup.
- 8 LAURENS KOSTER (Vis) 1923--Creamy white perianth, lemon-yellow cup, free-flowering, recommendper 100, \$5.00
- 1c LA VESTALE (de Graaff) 1927-Giant trumpet type with pure ivory white perianth, of informal design, with trumpet of deep cream yellow, tall, fine for small groups or naturalizing in dim shade; though of delicate appearance, it is of extra good substance and lasts per 100, \$16.00 well; very early. A.M. 1923.
- 2c LIDO (Brodie) 1927—A very nice Leedsii with large wide-spread pure white perianth and medium-sized primrose crown which passes to white; the flower attains exceptional purity of whiteness in the sunshine.
- 3b LIMERICK (Richardson) 1938—A very lovely flower, raised from Folly and Hades. The broad, flat perianth is pure white and the large, absolutely flat eye is intense dark cherry-red. A wonderful contrast in colors, one of the best we have seen. each, \$4.00
- 8 L'INNOCENCE (v.Z.) 1930-A very free-flowering new Poetaz of great merit for early forcing. The perianths are well rounded and the cups of a soft orangered. This is one of the newer varieties that are now replacing Laurens Koster. per 100, \$7.00
- 2b LISBREEN (Guy L. Wilson) 1938—Bred from Mitylene x Evening; a flower of excellent show form and balance, having broad flat perianth, pure white and overlapping. Grown nicely proportioned, strongly flushed pale orchid-pink. Greenish tone at base. One of the deepest pinks yet introduced. A.M., R.H.S. 1944. each, \$2.40

- 2b LOVENEST (Backhouse) 1928-One of the very few members of the "pink daffodil" class; among the daintiest of all the trumpets; medium in height with a starry shaped perianth of informal type; nicely proportioned trumpet of saffron yellow turning to apricot pink; delightfully charming at all stages; very early. A.M. 1925. per 100, \$20.00
- 2a LUCINIUS (Raiser unknown) 1928-A self-colored golden yellow flower of unusually good form and excellent substance. A very distinct type which should be of special value to hybridizers. per 100, \$8.00
- 2c LUDLOW (Will., A.M.) 1939, F.C.C. (e) 1940—One of the large cupped daffodils with near-perfect proportions, bearing and stature. The broad, flat, pure white perianth has great substance, the widely expanded, almost trumpet-shaped cup is tinged with green at the base. A tall, very prolific plant. each, \$3.00
- 2b MABEL TAYLOR (Clark) 1940—A tall mid-season pink with the shape and proportions of Tunis. Large flowers, well balanced on tall, stiff stems. Perianth is cream-colored, the cup large and expanded, soft yellow with a broad rose-pink band which is nicely frilled. In our experience a most valuable daffodil for breeding as it has many good qualities and seems well adapted to our climate. each, \$15.00
- 1c MAD. DE GRAAFF (de Graaff) 1887—This daffodil was the first of a new class and most famous of the white trumpets. F.C.C. 1887. Now of historical interest N.F.S.
- 3b MAGIC FIRE (de Graaff-O.B.F.) 1942—Striking flower of exceptional substance. Pure white, well overlapping and broad perianth, small cup with fiery red rim. One of the finest show flowers we have raised.

per 100, \$20.00

- 6a MARCH SUNSHINE (de Graaff) 1923-Smaller than February Gold and more adapted to rock garden plantper100, \$16.00
- 2a MARION CRAN (Will. P.D.) 1931, A.M. (g) 1936— A rather small, yet attractive daffodil, very free-flowering and recommended for naturalizing and for garden display. The well rounded perianth is soft yellow, the cup orange, an improved Croesus. per 100, \$10.00
- 2b MARTHA CLARK (West & Fell) 1935—A longstemmed, attractive, large-cupped variety. The perianth which is well-formed is pure white, the large, widely expanded cup opens yellow and turns pink with age. per 100, \$60.00
- 4 MARY COPELAND (Copeland) 1914-One of the famous varieties of the new double type, this variety has been termed the most striking double in cultivation; the longer petals are pure cream-white with a golden ray down the center, interspersed with shorter petals of lemon and brilliant orange, giving a threecolor effect; unsurpassed for the garden or the show per 100, \$24.00 bench. F.C.C. 1926.

KEY

1 Trumpet Daffodils

- a) yellow
- b) bicolor
- c) white
- d) others

2 Large-Cupped Daffodils

- a) yellow, cup colored
- b) white, cup colored
- c) white, cup white
- d) others

Division

3 Short-Cupped Daffodils

- a) yellow, cup colored
- b) white, cup colored
- c) white, cup white
- d) others

4 Doubles

5 Triandrus Hybrids

- a) large-cupped
- b) short-cupped

Division

6 Cyclamineus Hybrids

- a) large-cupped
- b) short-cupped

7 Jonquilla Hybrids

- a) large-cupped
- b) short-cupped
- 8 Tazetta (Bunch-flowered)
- 9 Poeticus
- 10 Species and wild forms
- 11 All others

- 3b MATAPAN (Richardson) 1940—A lovely quality show flower of medium size, with flat, very round, beautifully smooth, purest white perianth and a flat crown of intense crimson. Very early for this type of flower. Best flower Competitive Classes R.H.S. in 1941.

 each, \$6.00
- 3a MAYFLOWER (Backhouse) 1927—One of the new Barrii-Poeticus hybrids with perianth of pure glistening white, broad overlapping petals, and yellow eye with red picotee; extremely tall; very striking; late blooming. A.M. 1937.

 per 100, \$7.00
- 2b MELVA FELL (West & Fell) 1935—Like Jean Hood but later flowering, more refined in form and not quite as tall. each, \$1.00
- 2a MERULA (de Graaff) 1930—Very large flower. Perianth uniform soft yellow, cup widely expanded, soft orange. Nicely frilled and of great substance. A.M.H. 1932.

 per 100, \$24.00
- 2b MILFORD HAVEN (de Graaff) 1927—Fine flower with cream-white perianth and wide cup, ruffled and deeply frilled at edge, chrome yellow at base and shading into rich orange-scarlet, the same gorgeous color combination as in the Montbretia "His Majesty". A.M. 1926.
- 10 MINIMUS, true—The smallest and dwarfest of all Trumpet Daffodils, producing outdoors in February dainty little trumpet flowers of elegant form, rich full yellow, height 3 inches. It likes a peaty soil and may be naturalized in rock gardens or in grass, or grown in pots or pans for the Alpine house; no manure should be given.

 N.F.S.
- 5a MOONSHINE (de Graaff) 1927 A beautiful Triandrus hybrid, star-shaped creamy white flower, often 3 to a stem, drooping gracefully, very beautiful and a great favorite, especially for the rock garden or for naturalizing in the shade. A.M. 1930. per 100, \$10.00
- 1c MORAY (Brodie) 1928—A large, pure white daffodil that resembles the old Tenedos but is a much better flower, larger, whiter and of greater substance. The perianth is rather star-shaped, the cup or trumpet is long and well-shaped.

 per 100, \$40.00
- 10 MOSCHATUS OF HAWORTH—The snowy white daffodil of the Spanish Pyrenees, a dainty little flower variable in size with drooping perianth. A gem to naturalize in grass and for the rock garden, delighting in partial shade and on grassy slopes facing north. It also makes a charming pot plant, height 6 inches.

each, \$1.00

- 4 MOULIN ROUGE (Backhouse) 1926—Very lovely double, long primrose petals shading to cream down the center, short petals deep yellow-orange, giving a tri-color effect; light citron-yellow overlapping perianth, orange cup freely frilled; very late. A.M. 1926.

 per 100, \$16.00
- 1a MOUNT ROYAL (de Graaff) 1931—Wide spreading trumpet with perianth having three base petals extra wide, the three innner being narrower and more curved, making a particularly well formed attractive flower. per 100, \$30.00
- 3b MOUNT TACOMA (de Graaff) 1938—Star-shaped, creamy white perianth. Wide soft yellow cup with exquisitely frilled margin. A fine show flower. A.M.H. 1938.

 per 100, \$80.00
- 3b MR. JINKS (Brodie) 1930, A.M. (e) 1936—Fine short-cupped show variety, large glistening pure white circular perianth with rather flat red-edged crown.

per 100, \$50.00

- 3a MRS. BARCLAY (Mooy) 1924—Large flower with flat, reflexed, broad-petaled overlapping perianth of pale primrose; deeply frilled flat cup of primrose-yellow, with dainty orange picotee; extremely showy, and a great favorite in the garden for exhibition. A.M. 1925. Forcing Certificate 1936.

 per 100, \$7.00
- 1c MRS. E. H. KRELAGE (Krelage) 1910—Really a pale bicolor, but changing to a uniform ivory white. Smooth waxy texture and good form. A.M. 1913, F.C.C. 1939. per 100, \$14.00
- 1c MRS. JOHN BODGER (de Graaff) 1927—Considered by many the most exquisite of the new trumpets; a semi-dwarf hybrid of medium size, with a pure white star-shaped perianth and a good trumpet; wonderful variety for the rock garden or the front of the border; sure to become a great favorite as it has been enthusiastically received at every show.

 per 100, \$40.00
- 3b MRS. NETTE O'MELVENY (Backhouse) 1928—Surely the "little people" must have been abroad frolicking in the moonlight, when this fairy flower was born; a dancing daffodil with pure white perianth and cup of clear lemon-yellow, with orange picotee; splendid foliage, tall, graceful stem, and good neck; in every way a delightful flower and sure to become immensely popular.

 per 100, \$6.00
- 2b MRS. R. O. BACKHOUSE (Backhouse) 1923—This is the famous "pink daffodil"; fine informal perianth of ivory white, and beautifully proportioned, slim long trumpet of apricot pink, changing to shell pink at the deeply fringed edge; delicately beautiful but of exceptional substance; long lasting; early; belongs in every collection. A.M. 1923.

 per 100, \$20.00

- 4 MRS. WM. COPELAND (Copeland) 1930—Nicely formed flower in two delicate shades of sulphur white. Very graceful and in our opinion the finest of this type of double daffodils. A.M.H. 1940, A.M. (g) 1949, F.C. C. 1949.
- 3b MYSTIC (Wilson) 1923—A beautiful flower of great refinement, large broad perianth of a creamy white, large flat white crown with a narrow rim of soft clear pinkish orange shading to cool apple-green in center, strong grower. A.M. 1928.

 per 100, \$20.00
- 2b NAIROBI (Rich.) 1945—Most striking, large flower, with immensely thick smooth rounded white perianth of grand quality and a large, expanded much frilled cup of intense solid orange-red. Has won several First Prizes in Single Bloom classes.

 each, \$7.00
- 1c NIL KANTA (Wil., G.L.) 1941—A stately and imposing large pure white trumpet of smooth quality. Very broad perianth of heavy substance standing at right angles to the long slender neatly flanged trumpet—a most striking and pretty flower, fine both for show and in the garden.

 each, \$3.00
- 2b NISSA (Brodie) 1923—A most beautiful variety of great substance; smooth flat overlapping pure white perianth and large bright lemon crown neatly flanged at brim; perfect show flower and charming garden plant. A.M. 1928.

 per 100, \$20.00
- 2b NOVA SCOTIA (Backhouse) A.M.H. 1932—Very large flat golden-yellow cup with heavily fringed deep orange margin, perianth creamy-white. per 100, \$12.00
- 10 ODORUS CAMPERNELLII, true (Campernellii Jonquil)—Elegant rush-like foliage and clusters of bright yellow fragrant flowers with open deeply lobed cup, height 18 inches; valuable for border decoration and early forcing.

 per 100, \$5.00
- 10 ODORUS CAMPERNELLI PLENUS The tall double Campernellii Jonquil, a very charming variety, bearing on tall graceful stems heads of fragrant double yellow flowers of elegant form, height 15 inches. It makes an attractive pot and border plant, and will bear gentle forcing.

 per 100, \$6.00
- 10 ODORUS RUGULOSUS—Bearing rich yellow fragrant flowers, two to four on a stem, with broad imbricated perianth and straight wrinkled cup, foliage erect and rush-like, a fine showy variety when massed in beds and borders, and valuable for cutting. per 100, \$5.00
- 10 ODORUS RUGULOSUS GIGANTEUS—A fine largeflowered hybrid, almost a self bright yellow, perianth broad and solid, crown straight and broadly fluted at margin, height 18 inches. per 100, \$6.00
- 3b ORAN (Rich.) 1945—A very perfect Barrii of good size, with very round, flat, snowy white perianth of remarkably thick, waxy texture and a medium-sized almost flat crown of pale citron with a broad sharply defined margin of bright orange-red. Ideal show flower, very strong tall plant.

 each, \$2.00
- B ORANGE CUP (Tremp) 1916—Yellow perianth, cup orange-red, nicely frilled. per 100, \$7.00

- 2a ORANGE GLOW (Backhouse) 1922—Yellow perianth, of good substance, flaring trumpet, yellow with orange glow, rather frilled at edge. A.M.H. 1922.
 - per 100, \$8.00
- 7b ORANGE QUEEN (Goodwin) 1908—A very striking variety, 2 to 3 flowers on a stem, color intense, goldenorange, cup prettily fluted. Delightful jonquil fragrance. The flowers are produced in the greatest profusion on wiry stems about level with the tops of the strong but not coarse foliage; truly a daffodil for every garden and the gayest of the lot, large or small, for cutting, display or exhibiting.

 per 100, \$8.00
- 3b ORTONA (Rich.) 1945—A large and very striking Barrii with very broad flat pure white perianth of good quality and substance, very slightly pointed at the tips. The large, almost flat crown is intense deep orange-red with a green center.

 each, \$4.00
- 2b PENWITH (Brodie) Calvert 1930, A.M. (e) 1932— White perianth with a peculiar and attractive buff-apricot cup edged with gold. each, \$1.00
- 2b PINKEEN (Guy L. Wilson) 1931—A perfectly symmetrical flower with very smooth flat overlapping cleancut white perianth of exceptional substance. Cup flushed warm peachy pink when fully developed. Tall and free flowering.

 per 100, \$60.00
- 2a PIRATE'S GOLD (Will.-O.B.F.) 1942—Well overlapping, bright golden-yellow perianth with gracefully flaring brilliant orange cup. A flower of wonderful quality and perfect exhibition form. Our introduction for 1947. per 100, \$40.00
- 2c POLDHU (Brodie) Calvert 1930, A.M. 1935—Small, widely flanged, ivory cup, tinge of green at the bottom, perianth pure white. per 100, \$80.00
- 2b POLINDRA (P. D. Williams) 1927—A glorious Bicolor Incomparabilis with broad flat pure white perianth of great substance and smoothest texture, large well-finished clear yellow crown. A very large flower carried on a stem over 2 feet tall. Valuable for breeding. A.M. 1937, F.C.C. 1938. each, \$1.00
- 3b POMONA (de Graaff) 1926, A.M. 1936—Pure white wax-like perianth, petals overlap so that they form a complete circle. Flat, citron-yellow cup, flushed apricot with small orange margin. When fully opened, cup changes from apricot to green while the orange margin deepens and lends a unique beauty to flower.
 - per 100, \$36.00
- 1c PRESIDENT CARNOT (de Graaff) 1923—A selfcolored creamy white trumpet, of the Olympia type, with perianth petals slightly twisting and reaching forward, adding beauty of form to the charming color harmony. per 100, \$20.00
- 2b PROMISSO (Alister Clark) 1945—Very tall, well proportioned, the earliest good pink daffodil to flower for us. each, \$3.00

KEY

Trumpet Daffodils

- a) yellow
- b) bicolor
- c) white
- d) others

2 Large-Cupped Daffodils

- a) yellow, cup colored
- b) white, cup colored
- c) white, cup white
- d) others

Division

3 Short-Cupped Daffodils

- a) yellow, cup colored
- b) white, cup colored
- c) white, cup white
- d) others

4 Doubles

Triandrus Hybrids

- a) large-cupped
- b) short-cupped

Division

6 Cyclamineus Hybrids

- a) large-cupped
- b) short-cupped

Jonquilla Hybrids

- a) large-cupped
- b) short-cupped
- Tazetta (Bunch-flowered)
- Poeticus
- 10 Species and wild forms
- All others

- 10 QUEEN OF SPAIN-A wild hybrid discovered in Spain. One of the most beautiful, distinct and graceful daffodils, and recommended either for pots and bowls or for naturalizing in woodlands, rock gardens, etc. The flowers vary slightly in size, and sometimes in form of trumpet, but all are of soft, delicate canaryyellow, with a graceful reflexing perianth, height 12
- 1b OUEEN OF BICOLORS (Dutch) 1940—Large, bold golden yellow trumpet; perianth creamy white, stained yellow at base. per 100, \$16.00
- 3b QUEEN OF THE NORTH (Barr) 1908-Tall, attractive variety for cutting or naturalizing. A.M. (g) 1935. per 100, \$6.00
- 2c QUICKSILVER (W. Ison) 1923—Well named silvery white flower of pleasing proportions. Exceedingly graceful, fine for garden and show purposes.

per 100, \$20.00

- 10 RECURVUS (Old Pheasant's Eye)—Perianth pure white and reflexing eye margined deep orange-red. very fragrant; a favorite old variety. per 100, \$6.00
- 2b RED BIRD (de Graaff) 1934, A.M.H. 1936, F.C.C. 1938—Leading variety among recent introductions, the well-rounded, overlapping petals are of a fine white solid texture in sharp contrast to the fiery orange-scareach, \$1.00 let cup.
- 2a RED CROSS (Backhouse) 1928—Famous throughout the daffodil world, extra large, strong flower, opening flat, primrose yellow perianth and deep cup densely frilled, of deep orange; substanial and long lasting, and fine for both garden and for exhibition. F.C.C. per 100, \$12.00
- 2a RED SHADOW (Backhouse) 1929—A most attractive flower of bold appearance. The perianth is creamy yellow and the cup is dark yellow with orange-red margin. It is unusually free-flowering and a strong grower. Although one of the latest Incomparabilis types to flower it forces well and is very attractive in pots. One of the best exhibition flowers. A.M.H. 1937. per 100, \$10.00
- 2b REWA (Lower) 1928-Beautiful seedling from Bernardino x Fortune. Coloring resembles Bernardino, form resembles Fortune. Perianth is pure white, much overlapping, and perfectly flat, crown is large and a bright pinkish apricot. A.M. 1931, A.M. (g) 1946. per 100, \$60.00
- 1c ROMAINE (de Graaff) 1938-Very large, pure white, wide-open imbricated trumpet, most artistic and refined, extra novelty. A.M.H. 1939. per 100, \$24.00

- 3a ROMAN STAR (Backhouse) de Graaff) 1929, A.M. H. 1939—Cream-yellow, Poeticus-like perianth, glowper 100, \$60.00 ing red cup.
- 1c ROSABELLA (de Graaff) 1930-Fine informal perianth of creamy white; slightly flaring and nicely frilled apricot-pink trumpet. A most refined and welcome addition to the small group of "pink daffodils". A.M.H. 1930. per 100, \$80.00
- 2b ROSEGARLAND (Richardson) 1941—A large flower, having broad pure white perianth and shallow, roughly frilled bowl-shaped crown, pale primrose, strongly flushed and margined clear rosy shell-pink. Very tall and vigorous. A flower of great charm for cutting. each, \$1.40
- 3a ROSE MARIE (de Graaff) 1926—Extremely large flower on strong stem; broad petaled reflexing perianth; fluted cup of pale primrose, shading to deep primrose at the frill; beautiful and outstanding flower; medium late. A.M. 1926. per 100, \$16.00
- 2b ROSE OF TRALEE (Richardson) 1937-One of the best colored of a group of pink seedlings raised from White Sentinel. Flower of beautiful form and quality, having pure white perianth pointed at the tips; long crown nicely flanged at the mouth, of rosy-apricot-pink right down to the base. each, \$2.40
- 2a ROSSMORE (Rich.) 1945—A very bright early flower; smooth flat rounded bright yellow perianth and a goblet-shaped cup of intense deep orange-red.

each, \$2.00

- 1c ROSY TRUMPET (Back.) 1928—Star-shaped perianth, trumpet is a deep, satin-rose. per 100, \$20.00
- 2a ROUGE (Wil., G.L.) 1936—A strikingly novel and distinct "break" in narcissus coloring: the widespread perianth is yellow overlaid with pinkish buff tones. The expanding cup is of a deep, rather brilliant orangered. This variety invariably elicits much comment at shows and since it is early, vigorous and blooms and increases freely it may well be a good market flower each, \$1,20
- lc ROXANE (van Tub.) A large creamy white trumpet with round, overlapping, pure white perianth. A.M.H. 1926, F.C.C.H. 1930. per 100, \$16.00
- 4 ROYAL SOVEREIGN (Copeland) 1908-Valuable addition to the Twink group of semi-doubles, most graceful of all in form, and the most charming, if not the most striking, in coloring; creamy white interspersed with crinkled and frilled trumpet petals of primrose-yellow, shading to pale primrose as the flower develops; a daffodil appealing to every flower lover's fancy. A.M. (e) 1914. per 100, \$14.00

- 2a RUSTOM PASHA (Miss Evelyn) 1930—A large flower with most intense color, absolutely sunproof. The large perianth is deep golden yellow, and the rather long crown, deepest solid orange-red. A.M.H. 1943.
 each, \$1.20
- 8 ST. AGNES (P. D. Williams) 1926—Fine Poetaz with very flat, well rounded perianth and flat orange-red crown. Two or more flowers per stem. Sturdy grower and prolific. A.M.H. 1930, F.C.C.H. 1932. per 100, \$7.00
- 2a ST. EGWIN (Williams) 1927—Perfect quality, uniform soft yellow throughout, perianth segments overlapping, great substance. F.C.C. 1936. per 100, \$40.00
- 2a ST. ISSEY (P. D. Williams) 1927—A magnificent yellow Incomparabilis of great quality, with unusually round, overlapping smooth perianth and a rather straight crown, nicely serrated at the mouth. A.M. (e) 1938.
- 1c ST. MARY (Wilson) 1945—An exquisite pure ice white trumpet of utmost refinement, perfection of proportion, beauty of form and quality of texture. Broad perianth of fine substance and lovely somewhat slender but graceful bell-flanged trumpet, green rather than yellow shading at the base of the flower. each, \$8.00
- 1c SCAPA (Brodie) 1933, A.M. (e) 1939—A very fine white trumpet daffodil of wonderful quality and large size, with broad, flat overlapping perianth of beautiful waxy substance and a large trumpet, nicely expanded and rolled back at mouth. The whole flower is uniform pure white throughout and the plant is most effective in the garden or the show bench.

 each, \$3.00
- 2a SCARLET ELEGANCE (Will., P.D.) 1938, F.A.H. 1939—A really graceful, rather informal, daffodil with pointed, slightly twisted golden yellow petals and a vivd orange-red, expanded and fluted cup. By no means a show flower of classical proportions, it is just the same a handsome daffodil for cutting and since it is very free-flowering a good garden plant. per 100, \$12.00
- 2a SCARLET LEADER (de Graaff) 1933—One of the most sensational flowers of recent years. Vivid red, well expanded cup and pure white, overlapping perianth. Excellent show flower, good sturdy plant. A.M.H. 1931, F.C.C.H. 1938.
 per 100, \$60.00
- 3a SERAGLIO (Brodie) A.M. (e) 1926, A.M.H. 1930, F.C.C.H. 1936—Large, with pale yellow perianth, good substance, large, flat crown of bright yellow with wide margin of bright orange-red.

 per 100, \$60.00
- 1a SERAPHINE (van Tubergen) 1930, A.M. (g) 1930— Charming medium-sized flower, good stem, uniform delicate sulphur-yellow. A.M.H. 1926, A.M. (g) 1930. per 100, \$50.00
- 10 SEROTINUS—A very late little narcissus producing in October, on slender stems, miniature star-shaped fragrant flowers with silvery white perianth and minute golden yellow cup, sometimes two to three flowers on a stem, height 10 inches. Plant in a warm spot on rockwork and lightly cover during winter, or grow in pots in a cold frame.

 N.F.S.

- 2b SHIRLEY WYNESS (West & Fell) 1935—Well formed white perianth and light lemon-yellow crown with a heavily frilled border which turns pink a few days after opening. The stems are tall and stiff, the plant is very free-flowering and while the proportions are not perfect we have used it successfully in breeding and have found that it transmits the pink frill to its offspring.

 each, \$1.00
- 5a SHOT SILK (de Graaff) 1931—A charming triandrus hybrid, three flowers to a stem. Perianth and cup uniform creamy white, slightly star-shaped, long and narrow cup. This is undoubtedly the most graceful little daffodil in this class and will appeal to all lovers of the smaller types. A.M.H. 1933.

 per 100, \$16.00
- 7a SIERRA GOLD (de Graaff) 1927—A splendid flower of extremely rich coloring; an intense, pure buttercup gold, the beautiful little trumpet being reflexed and deeply frilled; it increases rapidly and makes an ideal daffodil for naturalizing or for the rock garden. A.M. H. 1932.

 per 100, \$6.00
- 1b SILVANITE (de Graaff) 1930—A striking new variety with broad overlapping perianth of creamy white, and light canary trumpet; strong grower, but graceful in habit.

 each, \$1.20
- 5b SILVER CHIMES (Martin) 1916—One of the prettiest of the small-cupped Triandrus hybrids, being a cross of Triandrus calathinus and Polyanthus Grand Monarque; frequently produces heads of six or more flowers with pure white perianth and delicate pale primrose cup; an ideal and most beautiful plant to grow in pots in a cool greenhouse. Not perfectly hardy. A.M. 1922.

 per 100, \$30.00
- 3c SILVER SALVER (Brodie) 1922—Purest white perianth and cup, perfectly overlapping perianth, cup very flat, glistening snow-white with a touch of cool emerald green in the center. Lovely, refined and good grower. A.M. (e) 1922, A.M.H. 1925. per 100, \$30.00
- 2b SILVER STAR (Backhouse) 1927—Perfect broadpetaled star-shaped perianth of pure cream-white, with finely proportioned, wide-mouthed trumpet of primrose, changing to cream-white, just a shade deeper than the perianth; extra fine, and free flowering, very fragrant.

 per 100, \$10.00
- 2a SIR WATKIN (Backhouse 1884)—Perianth sulphur, cup yellow, tinged orange. F.C.C. 1884. per 100, \$6.00
- 5a SNOWBIRD (Back.) 1923—A very beautiful and graceful variety, each stem bearing two snow-white flowers, perianth segments slightly reflexed, long graceful fluted crown, lovely as a cut flower. each, \$1.20
- 4 SNOW SPRITE (Barr) 1913—A double Leedsii; flowers borne on tall stems; pure white, interspersed with very light lemon; a novelty and a good florist's flower; extremely late, A.M.H. 1926.

 per 100, \$8.00
- 2b SONNICA (de Graaff) 1943—One of the latest Dutch novelties, first shown during the war years. Pure white, well rounded and overlapping perianth, large, flat orange-red crown. Fine exhibition-type plant with good texture, A.M.H. 1943.

- 1b SPRING GLORY (de Groot) 1914—Still a favorite both for the garden and for forcing; pure yellow trumpet, white perianth, excellent stem, and always free blooming.

 per 100, \$10.00
- 2c STATELINESS (Wilson) 1923—A very tall, distinguished-looking flower of largest size, having very large, wide-spread, star-shaped, even, waxy white perianth of smooth texture and much substance; a well-proportioned crown of pale, warm, peachy yellow, fading almost to cream; a big, striking flower, late.

 each, \$1.00
- 1a STATENDAM (de Graaff) 1929—Extremely large golden yellow trumpet daffodil of superb yet graceful proportions. Massive overlapping deep golden yellow perianth, large, flaring, well formed trumpet. Very vigorous grower. A.M.H. 1929. per 100, \$30.00
- 2a STELLA TIDD PRATT (Back, Mrs.) 1923—A companion plant to Red Cross, it has the same soft yellow, well-shaped perianth and a nicely formed, fluted orange-red cup. A grand garden flower, good for cutting.

 per 100, \$8.00
- 5a STOKE (Will., P.D.) 1934—A most attractive longcupped triandrus hybrid, very free-flowering and prolific. The small cups are of a soft creamy white, the perianth which is made up out of rather pointed segments is pure white. Fine subject for flower arrangements and for the garden. per 100, \$24.00
- 1a SUCCESSOR (de Graaff) 1943—A very late, deep golden yellow daffodil with remarkably good texture. Exceptional for late forcing in pans or for garden use where its late flowering is an added attraction.

per 100, \$7.00

- 2b SUDA (Brodie) 1927—A most beautiful show flower of fine substance, pure white perianth and well-formed bell-shaped trumpet of a pale amber-rose color, very refined, height 8 inches. A.M. 1927. per 100, \$60.00
- 2b SUNNYBROOK (de Graaff) 1938—Another grand John Evelyn seedling. Perianth of great substance, pure white and well overlapping. Cup very heavily frilled and fringed, deep orange-red. A.M.H. 1938.

 each, \$1.50
- 3b SUNSTAR (Backhouse) 1927—Creamy-white, broad petaled perianth, segments slightly reflexed; flat yellow cup with broad orange margin; tall fine stem and neck; Poeticus habit; beautiful both in the garden and on the show bench. A.M. 1928, A.M. (e) 1929, per 100, \$16.00
- 4 SWANSDOWN (Brodie) 1937—The most striking novelty in this group. A very beautiful double with large milk white flowers of fine substance. The petals are exceptionally broad and form a perfect saucer as a background for the white feathery looking inner petals. Carried on a stiff stem and short necked. This flower will doubtless have great market value, P.C. (e) 1940. each, \$12.00

- 2a TASHKEND (Brodie) 1927, A.M.R.H.S. 1930—Perfectly shaped large self-yellow carried on a very tall stem, vigorous, A.M. (e) 1930. each, \$1.40
- 4 TEXAS (Backhouse) 1927—Taller growing and of better form than Indian Chief; pale yellow interspersed with brilliant orange, A.M.H. 1927, F.A.H. 1936, F.C.F.A.H. 1938.

 per 100, \$20.00
- 5a THALIA (van Waveren) 1916—Two or three lovely pure white flowers per stem, 2 inches or more across, making a beautiful cluster. Very suitable for the rock garden or for forcing.

 per 100, \$14.00
- 4 THE PEARL (Zeestraten) 1923—Nice flower; not too double, creamy white, interspersed with sulphur-yellow, deeper at the center, very charming. per 100, \$8.00
- 3b THERAPIA (Brodie) A.M. (e) 1927, A.M.H. 1930— Very bright, large size, good form, the rounded perianth is white and the flattish yellow corona has a broad orange-colored rim. per 100, \$80.00
- 7b TREVITHIAN (Williams) 1927—One of the best of the short-crowned Hybrid Jonquils raised by the late P. D. Williams; an extremely fine free-flowering garden plant producing two or more sweetly scented flowers on a stem; broad overlapping perianth of smooth texture and shallow crown, of a pale self lemon-yellow throughout. F.C.C. 1936, F.A.H. 1938. per 100, \$6.00
- 10 TRIANDRUS ALBUS—The dainty little "Angel's tears" daflodils were found by the late Mr. Peter Barr in the mountains of Spain and Portugal, growing in very hard, firm fine gritty soil, sometimes in the narrowest fissures of granite slatestone rocks. They make beautiful pot-plants and do very well in the rock garden where they form a picture of grace and beauty. They prefer shade, a gritty soil and a well-drained position; no manure should be given.

 per 100, \$20.00
- 10 TRIANDRUS CALATHINUS—One of the most beautiful little daffodils in existence. The flowers, which are produced in drooping clusters of two or three, are snowy white, and more than twice the size of Triandrus Albus, with long goblet-shaped crown prettily fluted; the foliage has a curious habit of curling over, height 7 inches. For pots and the rock garden it is a perfect gem. This beautiful little daffodil thrives best in a mixture of leaf-mould, heath soil and coarse sand, with just a little bone flour added; no other manure should be given. The late Mr. Peter Barr collected this rare daffodil some years ago on one of the sea-swept Glenan Isles (off Brittany). Unfortunately it is no longer found there, the sea having washed away all trace of this little species. It is, however, readily raised from seed. per 100, \$30.00
- 10 TRIANDRUS CONCOLOR (true)—Bearing clusters of dainty fragrant flowers of similar form to Triandrus Albus, but of a uniform soft creamy yellow, a very rare and beautiful little daffodil, height 7 inches per 100, \$50.00

- 10 TRIANDRUS PULCHELLUS—A very beautiful little variety with elegant clusters of flowers with primrose perianth and creamy white cup, height 9 inches.
 - per 100 \$50.00
- 1b TROUSSEAU (P. D. Williams) 1934—An exquisite Bicolor trumpet of superb quality and finish; perfect form, great substance and satin-like texture. Very broad smooth flat pure white perianth, and well proportioned straight neatly flanged trumpet which opens soft yellow and passes gradually to a most lovely rich buff rosy cream, entrancingly rich and delicate in effect. The large flowers, which are exceptionally durable, are perfectly posed on strong stems. Vigorous plant with blue-green foliage. A.M., (e) 1945, F.C.C. (e) 1947.
- 2b TUNIS (P. D. Williams) 1927—A large tall robust growing "Leedsii" of most distinct character and great lasting substance; broad waved white perianth and large bold ivory crown with handsome flanged and serrated brim, retaining a remarkable flush of pale coppery gold at the edge. Wisley Trials. A.M. (g) 1928, F.C.C. (g) 1936, F.A.H. 1937. per 100, \$11.00
- 4 TWINK (de Graaff) 1927—Perhaps one of the most promising daffodils we have introduced. It is a double of the semi-full type, the petals alternating a soft primrose and clear orange, and so arranged as to give the flower a most attractive appearance and to make it a most adaptable flower for large scale decorative work. Twink forces as easily as Golden Spur, but also flowers very early in the field, is very free-flowering and hardy and we sincerely believe that, as soon as the stocks become larger, this variety will be used by every commercial grower. In the meantime it is a most splendid show flower and has created much interest whenever shown. A.M. 1926.

 per 100, \$9.00
- 1a UNSURPASSABLE (Lubbe) 1929—F.C.C.H. 1926. In our tests this variety stood out as one of the best of the new Dutch yellow trumpets. Golden yellow throughout, the flower has noble proportions, good size, stature and build. Definitely a showflower and also a good one for the commercial grower as it forces well and early.

 per 100, \$20.00
- 2b VERONICA (de Graaff) 1927—Perfectly rounded, broad-petaled, pure white perianth; small deeply frilled and fluted cup of pinkish apricot; especially dainty and charming.

 per 100, \$30.00
- 1b VICTORIA (van Veen) 1897—A standard commercial flower for forcing. A.M. 1897 per 100, \$10.00
- 2b VIOTTA (de Graaff) 1944—An enormous flower with sulphury white, star-shaped perianth and beautifully frilled, wide open trumpet. This flower may not be to everybody's taste but it is sure to attract attention at any show because of its enormous size and fine proportions.

 each, \$1.00
- 2b VOLTURNO (Rich.) 1945—A striking large Barrii with broad, smooth, flat pure white perianth of fine substance and a large saucer-shaped deep yellow crown, heavily banded and suffused with bright orange-red, nicely frilled at edge.

 each, \$3.00

- 2a WALTER HAMPDEN (de Graaff) 1930—Very tall and outstanding; bright primrose perianth and pure yellow trumpet of Loudspeaker type, with a tint of orange in the frills; very vigorous grower; medium late. A.M. 1928.

 per 100, \$10.00
- 1c WHITE EMPEROR (Engleheart) A.M. 1913—Graceful parent of many other fine white varieties.

per 100, \$80.00

- 2a WHITELEY GEM (Brodie) 1928-This daffodil was awarded the Gold Medal for the best new variety at the London Daffodil Show, March, 1928. It is extremely early, by far the earliest of the red-cups to flower on our farms. On a very tall stem the flower is beautifully balanced, the proportions of perianth and cup are very pleasing. The perianth is not much overlapping but of great substance. The coloring is very fine, deep golden yellow for the perianth and a bright orange for the finely fluted cup. We recommend this daffodil most strongly for hybridizing purposes as its extreme earliness makes it very valuable for the forcing trade. Also for general garden use it should be most satisfactory as this extreme early flowering prolongs the season of the red-cups about two weeks. A.M.H. 1931, A.M. (m) 1934. F.C.C. 1935. per 100, \$12.00
- 2b WILD ROSE (Brodie) 1937—A most attractive and striking flower and a real advance in pink coloring as the cup is a definite solid rosy pink to the base. The petals are a rather transparent pure white. P.C. 1946. each, \$6.00
- 1a WINTER GOLD (Barr) 1928—Very early, of great garden merit, producing flowers of very elegant form in February. Perianth bright yellow, trumpet long and straight of a deep golden yellow, prettily frilled at mouth. Very showy, height 18 inches. Forces as early as Golden Spur, but has much better form and color. A.M. (m) 1936, A.M. (g) 1936. per 100, \$7.00
- 8 WINTER PRIDE (Mooy) 1931—A.M.H. 1930, F.A.H. 1931. One of the new Poetaz varieties and an outstanding forcer. Petals well rounded and overlapping, cups golden yellow; this variety stands out for its size, the number of flowers and its strong stems and foliage.

 *per 100, \$7.00
- 1a YELLOW CLOUD (de Graaff) 1938—A golden yellow, well proportioned and refined King Alfred seedling. The flowers are very large and well poised on 20-inch stems.

 per 100, \$8.00
- 2a YELLOW POPPY (Cartwright & Goodwin) 1914—Well-formed flowers with overlapping primrose-yellow perianth and expanded shallow cup, bright yellow, edged orange, height 20 inches. Excellent for forcing and unsurpassed for naturalizing. Highly commended R.H.S. trials in Wisley, 1936, A.M. (g) 1947.

per 100, \$7.00

2c ZERO (Guy L. Wilson) 1935—A glorious flower measuring up to 5½ inches in diameter. Very large broad flat widespread perianth; the beautiful vase-shaped crown has a slightly expanding bell mouth; purest icy white throughout, with lovely deep green perianth tube; tall strong stem and short neck.



LILY POSTER

In the fall of 1949 we printed a large poster, showing in full color the outstanding types of new lilies raised by us. We have a very limited number of these posters left and can supply them at the special price of \$2.50 each, postpaid. Please remit with order.

Poster size 44 x 34", will be shipped via parcel post in strong, fibreboard mailing tubes.

Increase the effectiveness of your own lily promotion material with Full Natural Color reproductions of one or more of the 27 new lilies shown on the poster mentioned above and shown on the facing page.

For full details on inserts, folders, covers and complete catalogs write direct

to -

ABBOTT, KERNS & BELL COMPANY
PRINTERS AND LITHOGRAPHERS
Box 4379 PORTLAND 8, OREGON



Iris that Grow from Bulbs*

JAN DE GRAAFF, (Ore.)

The bulbous iris include some very fine varieties that are used extensively for forcing during the winter months. Most people, even non-gardeners, are therefore well aware of their existence and will readily identify them when they see them in the flower shops. That these same iris have not found general acceptance as garden flowers cannot then be ascribed to lack of knowledge of them. It must rather be due to a variety of causes, some economic and some cultural. The interplay of these factors throws an interesting light on a question that has certainly occurred to many gardeners. This

Jan de Graaff, head of the Oregon Bulb Farms, Sandy, Oregon, is a distinguished plantsman whose ancestors for generations in their native Holland made important names for themselves in the growing of plants and bulbs. Combining an Old World love of beautiful plants with American ingenuity for fashioning machinery that enables him to grow them by the millions, de Graaff now produces for our gardens a large share of the daffodils, lilies and bulbous irises that are grown. The Bulletin is proud to present his informative article.

Incidentally, if you've never tried the intriguing bulbous irises, invest in at least a few dozen bulbs of the Dutch varieties this fall and grow them just as you do your tulips. They'll surprise you with real "outdoor orchids" next spring—wonderful for cutting.

question is, what actually makes a garden plant popular and what controls its general availability?

Bulbous iris are not difficult to raise. They are hardy and will grow without attention in even the poorer soils. Planted in small groups in the garden, in sunny locations with a porous, well-drained soil, they will flower profusely. They multiply quickly and will not only provide a handsome picture in the June garden, but also furnish many fine cut flowers for the house. When, however, they are grown on a larger scale, such as in a commercial nursery, they

^{*} Reprinted from the Bulletin of the American Iris Society, July, 1949.

present many problems and a real challenge to the grower's skill and knowledge.

These problems are of various types and every one has to be solved separately. In the first place, the small size of the iris bulbs and their offsets requires special machinery to harvest them. Of course, on a small scale they can be grown in rows, planted and dug by hand. A good, stout shovel, a strong back and a great deal of patience can do wonders with a row of iris bulbs. Even the most careful bulb digger, using a screen to separate the bulbs and bulblets from the soil, will however, overlook some of the smaller or smallest splits. In larger plantings hand digging would be entirely too costly and special machines have thus been built to get the bulbs out of the ground. Having designed and used two of these machines, I know that even they do not solve the problems of getting all the bulbs out of the ground.

What happens then is this. Small bulbs, or splits, stay in the ground. They grow on and again throw off splits, even before they have flowered. Now, when we consider that, both for greenhouse use and for general garden purpose, the best type of bulb is the one that has not yet flowered but has reached a size large enough to flower the following year, it becomes obvious that in order to keep stocks true to name and free from rogues, new ground must be provided for all the iris every year.

Some growers have tried to offset this factor by growing only one variety, so that if there were mixtures of old and new stock, they would cause no difficulties. This, however, does not solve the next problem, namely that bulbous iris have a habit of making at least some top growth in the fall. These rather tender, pointed spears of foliage are subject to damage from hail, ice or mechanical injury, such as raking, during the usual fall cleanup. When damaged, this still tender foliage offers a ready field for fungus attacks. It is, therefore, essential that the emergence of iris foliage be retarded to avoid damage and fungus infection. This is done by planting the bulbs late and by storing them, prior to planting out, in a warm, dry, well-ventilated room or warehouse. Planting such retarded bulbs in a field where remnants of previous iris crops might still be present would expose the late new crop to fungus attacks that have developed during the winter on the foliage emerging earlier from last year's bulbs or from bulbs that might have been left in several years ago. While a carefully managed and rigidly followed spray program will control fungus attacks, the value of the iris crop is such that no undue risks can be taken by the growers and, hence, new land for each year's crop still remains essential.

The omnipresent virus disease presents still another problem that can, at least, be partially solved by planting the bulbs on new land. As in almost any other horticultural crop, bulbous iris are very much subject to virus diseases which can spread at an alarming rate. The almost total disappearance of the pretty Spanish iris and the ugly spotting of the flowers of English iris must be ascribed to this scourge. It is transmitted by insects which feed impartially on diseased and healthy plants and infect the latter. To the grower who is spending much money and time to free his plantings from virus-diseased plants, and to keep them clean, the threat that possibly diseased volunteers from previous crops might show up is enough to make him look for fresh land in entirely different locations.

If we add to these problems the ones of rodent attacks, leaf spot diseases and mechanical injuries of the bulbs in digging, cleaning and grading, then we find that bulbous iris production is one phase of horticultural effort that has its full component of problems and difficulties.

These troubles, however, absolutely do not militate against the bulbous iris for garden use. It is only when we bring millions of bulbs together in a comparatively small area that the chances for disease and pests attacking the planting multiply in geometrical proportion. It is not that a planting of one thousand bulbs is twice as vulnerable as a planting of five hundred. The chances of trouble developing are at least a hundred times as great.

Big Business

Commercial production of bulbous iris, then, is "big business." It takes expensive equipment from the moment that the land is prepared to the happy day that the crop is harvested. Briefly, the requirements are tractors for plowing, disking and harrowing; slow moving tractors for planting and digging; special machinery for the harvest; air-conditioned rooms for curing the crop, and constant heat until late in the fall when the retarded and cured crop is planted back. In the meantime the salable, round bulbs have

been separated from the planting stock and have been run through very expensive mechanical grading processes. They have been counted, packed in sacks and again in wooden crates. With all this expense before a single bulb is marketed, the grower can hardly be expected to spend much time or money in merchandising his crop. He is apt to sell it through the five or six large jobbers of quality bulbs that exist in this country. The jobbers, in turn, cater mainly to the commercial florists who buy in large quantities for cash.

Cultural problems, then, call for expensive machinery which again must be supported by large acreages in order to be profitable. The high cost of production of the bulbs plus the still higher cost of production for the flowers, when forced during winter, all call for the greatest possible economy all along the line. That economy can best be achieved both by the bulb grower and by the florist by concentrating on as few varieties as possible and preferably on only one variety. With one variety only to consider, the habits of growth, the dates of flowering and of maturity will all be identical and crops can thus be timed to best advantage. All these factors then have tended to lessen the number of varieties produced. It is equally true that they have been instrumental in increasing the number of bulbs grown of each variety, which, in turn, has made it possible to lower prices.

In concentrating on a single variety it is obvious that the demand of the commercial florist must be the controlling factor in its selection. He buys iris bulbs, not by the hundreds, but by the hundreds of thousands and orders placed by the leading bulb jobbers for several million bulbous iris are not rare. The total demand of the public for iris for garden decoration is not more than 5% of the total used for forcing and hence it plays a comparatively small role. The florist wants an iris that forces easily, that lends itself to timing for special holidays and requires little space in the greenhouse. The variety that by common consent is the best for this purpose is the I. tingitana hybrid, Wedgewood, raised before World War I in our nursery in Leiden, Holland, and, by now, undoubtedly the most widely grown and popular bulbous iris.

It is interesting to note, in passing, that at the time it was our aim to produce an iris for the garden rather than for forcing or for the greenhouse. Wedgewood and its companion seedling The First were judged to be rather unattractive for the garden, mainly because of their typical I. tingitana foliage, very wide and soft so

that it falls over rather than stands up straight. These two hybrids were also considered to be not quite hardy enough for the Dutch climate and the stock that had been accumulated was destroyed. In the meantime, however, samples of all the bulbous iris produced by our firm had been sent to Messrs. Lowe & Shawyer, owners of large greenhouses near London, England. After they had been forced, it at once became apparent that in Wedgewood we had raised a forcing iris of the very highest quality. The little sample was carefully grown to maturity, the bulbs saved and from these few a new stock built up, one which, by now, covers many hundreds of acres.

Blues Are Favorites

While Wedgewood is and for many years will be the leading variety for greenhouse use, the florist and the public, as well, have been rather surprised that it should be the only iris now available in quantity and are now demanding other colors. Confronted with this demand, the growers have again turned to those iris which by virtue of their resistance to virus diseases and other cultural troubles offered the opportunity for mass production with its ensuing lower production cost. Without any doubt this was found in the old variety Imperator. Darker blue than Wedgewood, later and with a slightly smaller flower, it is a perfect flower both for cutting and for garden decoration. It is generally considered to be hardier than Wedgewood and can be produced commercially in regions where Wedgewood does not thrive.

With two good blues, one light, early blue and the other dark and late, there still remained a need for a good medium-late, light blue of good size. This gap has now been filled quite adequately by the beautiful Blue Horizon, an introduction of our firm of some ten years ago. Strangely enough, with adequate stocks of these three good blues, the demand for other colors has been less active. Our records show that even with plenty of other colors available, blue iris outsell the yellows and whites almost ten to one. This percentage differs somewhat according to the region. San Francisco, for instance, has always insisted on receiving a larger proportion of yellow iris. Los Angeles florists seem to be more partial to whites.

The yellow iris are dominated by the variety Yellow Queen. Again an introduction of our firm, this one is very old and dates back to long before World War I. It is most prolific and will flower

from even the smaller splits. It, therefore, presents very definite and unique production problems, not the least of which is to save enough of the little splits to build up and strengthen the foundation stocks. Yellow Queen has good, long, wiry stems. It flowers profusely, often with more than two flowers per stem. Its color is a good golden yellow and while the flower is not large, it is of nice proportions. Several new yellow iris have recently made their bow, among them Golden Harvest and Golden Emperor. Although both have much larger flowers than Yellow Queen, they are not nearly as graceful and refined. Best of all the yellow iris to date is Golden Lion.

A Perfect Flower

GOLDEN LION is that curious phenomenon, something that we find in the plant world only rarely, but often enough to be marked down as a definite occurrence; that is, a perfect flower. This is not just a rash statement, made to promote the particular variety. Among bulbous plants there have been other such perfect flowers. Darwin tulip Clara Butt, for all its fifty years, remains without a flaw. Daffodil King Alfred, of the same vintage, has no trouble at all in holding its position as the most popular and outstanding flower of the entire daffodil family. Among the iris Golden Lion fulfills the same role. It sets the standard for all other iris. Although it appears to have one flaw, since it seems to be a slow propagator, that may not be the case, since we have never had a large enough stock of it to make an adequate test with various methods of production. Golden Lion has been so much in demand and is so pretty that it has always been sold before we could accumulate any considerable quantity. It is a ruffled golden yellow iris with graceful and well-proportioned flowers borne on tall, wiry stems. The foliage is narrow and slight and the whole plant is most attractive, both in the garden and when cut. It is an extremely late iris and may well be, in part, of Spanish iris origin.

Among the white iris the old White Excelsion has pretty well been eliminated in favor of White Superior and White Perfection. Both are expensive, the latter still far too much so, but they will soon replace White Excelsion. Recently in an old garden I found a small stock of the Spanish iris, King of the Whites. This is a charming, very pure white iris with a very narrow, golden

orange stripe down each fall. I am building up a stock for no other purpose than to have it for table decoration in my house. A silver bowl filled with some fifty or sixty stalks of this little gem is a pleasure to behold.

Iris lovers of an older generation will remember many other varieties. There were the Spanish iris such as King of the Blues, THUNDERBOLT, a bronze one; CAJANUS, a tall and pure golden vellow; Flora, white and lilac, etc., etc. All of these have succumbed to virus diseases and to the competition of the more vigorous, larger and taller Dutch iris. But even among the Dutch iris the mortality has been high. Breeders are constantly striving to improve them and new varieties, with clearer colors, larger flowers and better growing habits, are replacing the old standbys. Currently popular are the already mentioned Wedgewood, Imperator, Yel-LOW QUEEN and WHITE EXCELSIOR. Another white, D. HARING, is taller, but not quite as well formed nor as pure in color. THERESE Schwartz is one of the very prettiest iris with a two-toned flower of white and light lilac. Pure lilac are Mauve Queen and Violet QUEEN, while the already mentioned BLUE HORIZON adequately fills the need for a medium-early light blue.

Notable Newcomers

This list would not be complete without two additions, not merely of varieties, but of families of hybrids. The one is the result of crosses made by Mr. Carl Salbach who used various Dutch iris and combined them with the species I. fontanessi. The results of these crosses are a race of very dark pansy or violet-blue iris of a distinct velvety character. The first one to be marketed is called NATIONAL VELVET and promises to be immensely popular. The other family of new hybrids consists of a number of extremely deeporange colored iris of which Orange King is probably the best example. Princess Beatrix is another iris that bears watching.

Unfortunately the Holland growers have been raising a large number of new Dutch iris and are marketing them in this country without adequate trial. Many of the varieties promoted by them are simply variants of already existing types and are not worth a great deal more. Others are definitely good, but again they resemble each other too much. Some excellent new varieties will eventually emerge and possibly even a few that will be of merit for forcing. This would mean that again mass production would be possible so that low costs can be established. In my opinion, the low cost of bulbs of this type is a pre-requisite to popularity. These Dutch iris are not items to be set out singly, to be admired and cherished and to be nursed along by amateur growers until adequate quantities are available. They should be grown by the acre by professionals, so that the amateur can buy them cheaply and in good quantities. Only then can the bulbous iris come into its own, as gay masses of color in the June garden, as huge and graceful bouquets in the house.

I have expressly refrained from mentioning many of the other bulbous iris. The sweet, violet-scented I. reticulata is now available in new varieties. The English iris are again with us in good quantities and at low prices. The reader is referred to the excellent catalogs of our seedsmen for sources of supply and for information about the varieties that are currently available.

As I mentioned in my report on bulbous iris, printed in BULLETIN 87, October, 1942, the entire group of bulbous iris, large and heterogeneous as it is, should become an object of study for some young taxonomist and geneticist. A critical study of these fine garden plants is long overdue.

JOIN The AMERICAN IRIS SOCIETY

Members receive large, well illustrated quarterly magazines of more than 100 pages each, covering all phases of iris culture and containing news about all types of irises. Membership dues of \$3.50 per year should be sent direct to

A M E R I C A N I R I S S O C I E T Y
444 Chestnut St.

Nashville 10, Tenn.

From: OREGON BULB FARMS, Gresham, Oregon February 1950

Use Color in your Catalog.

We strongly urge you to consider using our lily pictures in full color in your 1950 catalog. All pictures shown in our large lily poster, mailed to you in 1949, are available. This poster is printed in lithographic or offset process. Our printers, Abbott, Kerns and Bell of Portland, Oregon, stand ready to quote you attractive prices on color work for your catalog, special inserts, covers, etc.

For those of our customers who cannot use the offset process, or who want their printing done in a local plant, we have made up a group of eight new lily pictures in letterpress printing plates. These pictures are made in four color process and we can supply you with electros at \$60.00 per set. If ordered in groups of four subjects at a time, the cost can be reduced to \$52.50. Both quotations include the progressive proofs. It is our intention to use the revenue from the sale of electros to engrave further plates and, as the years go by, we expect to have a complete and representative group of lily pictures in both offset and in letterpress process available to the trade.

For 1950 we have made up eight new plates. Four of these are in "outline", without background, in approximately $3\frac{1}{2} \times 4$ " size. They are:

- * SERENADE. outward facing new Tigrinum hybrid
- * ENCHANTMENT, U. S. plant patent 862, upright, nasturtium-red, Tigrinum hybrid rew Umbellatum hybrid
- * AMABILE & AMABILE LUTLUM, one red and one yellow flower

Four other plates will be made with backgrounds, in approximately $3 \times 3\frac{1}{2}$ " size. They are:

PAGODA, group of stems in vase $(3-1/8 \times 3\frac{1}{2}")$ CANDIDUM "Cascade Strain", single stalk $(3 \times 3-3/4")$ TALISHAN, new Tigrinum-Willmottiae hybrid $(3 \times 3\frac{1}{2}")$ PINK CENTIFOLIUM, grand novelty $(3 \times 3\frac{1}{2}")$

The electros will be available by February 1. To expedite delivery please order direct from the engravers:

Hicks-Chatten Engraving Company, Mr. W. J. Jennings Hughes Building, 115 S. W. Fourth Avenue Portland, Oregon

* Plates marked * are entirely new. All others are identical, except in size, to the ones used on our wall chart.

. STOLLS. THE SERVICE LAND SET

TO A PART TOWN TO THE PART OF THE PART OF

Laterance of the second of the second

Carlotte Committee Committ

Control of the Contro

विभिन्नत्वे अस्ति १ । १ ५४३ १८ १३ १८ १८ ।

was and a sixt of the kind of the sixty of internal and light not only to make a supply to the control of the

TOTAL NO. 1. Section 1

THE RESIDENCE OF THE PROPERTY ("Ex C) white white white of the comment of the series of

AND WAR STATE OF THE STATE OF T

TOTAL COS COS . . II motivies exercit (Territory)

THE HOME GARDENER'S MAGAZINE





LILIES TRANSFORMED

The development of new and more adaptable hybrids from choice but "difficult" species

By JAN de GRAAFF, (Ore.)

Herman V. Wall photos, Courtesy Oregon Bulb Farms

LILIUM CENTIFOLIUM grows high above a wild river in China, clinging to rocky crags, thrust out at right angles from red sandstone cliffs; in another area it grows among grass and low shrubs on open slopes. L. Henryl grows on conglomerate rocks, among a tangle of small trees, tall shrubs and coarse herbs, in a region which has a summer rainfall of about 30 inches. L. Hansoni is found on a little island in the Japan Sea, off the east coast of Korea. Other lilies grow wild in Europe and still others in our own country.

In its own habitat, each species is in harmony with its surroundings, its soil and its climate. The older the species, in fact, the more it is conditioned to live under the limitations imposed upon it. It must thrive on so many inches of average rainfall. It must grow, flower and set seed under a given number of hours of daylight. It must withstand so many degrees of frost and so much summer heat. And it must adjust itself to a cer-

tain amount of variation from what might be considered "normal."

As a matter of fact, lilies possess considerable ability to adjust themselves to hardships in the form of changed climatic conditions. If they did not, they would never have become the beloved garden plants they are. Nevertheless, it would be foolish to assume that an Oriental plant conditioned to grow under an average of 30 inches of summer rainfall will continue to flourish if suddenly moved to an American garden where it receives almost no summer rain at all. You simply cannot expect a lily, in one or two generations, to cast off or lose the characteristics that were imposed upon its development by its native environment.

What, then, are the chances of obtaining lilies that will thrive under our garden conditions, quite different from those to which the wild lilies are accustomed? Until recent years the answer would have been that the chances were

none too good. Many wild lilies had been imported, but nearly all of them had died.

Notable exceptions, of course, there were. The REGAL lily thrives in the United States; the TIGER lily grows as well here as in its native land, perhaps better; UMBELLATUM lilies have become thoroughly at home and are known to all American gardeners. Add to these L. CANDIDUM, or MADONNA lily, L. SPECIO-SUM RUBRUM and ALBUM and L. HENRYI and we have a sextet of lilies that have become almost the entire representation of the genus lilium in the gardens of our country.

But what about all the others? Why are there no stocks of the lovely L. Cernuum, with delicately violet colored flowers? Why such small stocks of L. Martagon album, or of L. Concolor? Why practically none of L. Nepalense, L. Ochraceum and so many others that are so desirable and beautiful?

It is my contention that these lilies, which have not made themselves at home in our gardens, have too limited a tolerance to changed conditions. They are too rigid in their requirements. They have become specially adapted in so many respects that they cannot adjust themselves to the many changes of a totally different environment.

Another point that must be emphasized is that a lily bulb imported from abroad has already suffered a great deal on its journey. It is a simple truth that lilies are never dormant in the same sense that tulips, daffodils and other so-called Dutch bulbs are dormant. Consequently their roots should not be allowed to completely dry out and they should not be out of the ground longer than is absolutely necessary. For this reason, no imported lily can give its best performance, for, whether it comes from Japan, England, Holland or France, the period between digging and replanting is far too long for optimum performance.

In the case of lilies collected "in the wild" the time-lapse between digging and replanting is usually much longer and the abuses to which the bulbs are subjected are usually much more severe. As if the rigors of such transportation were not enough, the bulbs are then planted in an alien soil and made to grow in a foreign climate, both totally different from the conditions to which they had been accustomed.

A bulb so treated will make a supreme effort, the supreme effort. Exerting all its strength, it will flower once more and may even set seed. Then, as a rule, it will die. The shock of travel and its new surroundings, followed by the effort of flowering and producing seed, have exhausted its vitality. This applies to all "difficult" lilies and also, to a lesser degree, to imported "easy" lilies. In the



The author is shown above with centifolium Olympic Hybrids which have great vigor, size and fine form.

only to the veins and backs of petals, and out come trumpet lilies in new colors and in giant sizes—the Olympic Hybrids, the Green Mountain Hybrids, the Green Mountain Hybrids, the Green Dragon Strain and others. Offered and sold in broad groupings, based on flowering time, coloring and form, these are garden lilies that are taking the world by storm—overshadowing the parents that are pale, weak and small in comparison.

Cross the purple and the white L. MAR-TAGON with L. HANSONI, link the likes and dislikes of the Yugoslavian with the Japanese, mix up their colors, shapes and season, and out come what, in honor of Mrs. R. O. Backhouse of daffodil fame who made numerous such crosses, are known as the BACKHOUSE LILY HYBRIDS. Sturdy and sure-footed, like the peasants of the Balkans, they also have the color and refinement of Japan's prettiest Geisha girls. Like little lanterns in magic colors, they hold us spellbound. Gracefully poised, powdered with delicate colors, spotted like precious bird eggs, they seem to illuminate the garden. No gardener can resist their charm. Unfortunately, they are still rare and slow, hence expensive to produce. The most recent hybrids, however, have shown greater vigor.

And there are more of such crosses, many more. But even then the story does not end, for these are just the primary crosses, only the beginning of this fascinating kaleidoscope of nature.

What would you say if into this array of new colors and shapes we introduced still further refinements, still greater improvements? A dash of L. DAVIDI pollen put on the stigma of certain of the MID-CENTURY beauties and we have the Hollywood Hybrids, another new race, totally different lilies with delicately star-shaped flowers, borne on tall, wiry stems. Each one of these is to have a real flesh and blood Hollywood starlet as its godmother.

Add a dash of that sweet little lilacviolet shaded L. CERNUUM to these HOLLY-wood Hybrids and the colors change again. Cross the gorgeously colored L. Speciosum with the no less beautiful L. Auratum and intermediates will grow, hardier and stronger than either parent. Backcross them and still more variations and still newer and better qualities appear. Mix in L. Japonicum, that delicately-hued pink trumpet lily, and there emerge visions of beauty too refined, it seems, too beautiful for mere mortals to own.

In every direction, new, enticing roads becken. Not only beauty is the goal, but also greater adaptability to garden conditions, greater hardiness and greater resistance to disease.

In the light of progress already made, it is time for a re-appraisal of the lily as a garden plant, and also for revision of so-called planting instructions.

Lily catalogues and lily books abound in information about proper depth of planting of lilies. As I have discovered during the past few years, much of this information is entirely erroneous. On the basis of recent experiments and research, we can now say that lilies prefer shallow to deep planting. The roots are, apparently, contractile and pull the bulb down to its favorite level. The opposite is not true and, once planted too deep, the lily will suffer and may eventually fail completely.

Broadly speaking, lilies can be divided into three categories. L. CANDIDUM and its hybrids like shallow planting and should just barely be covered with soil. The stem-rooting lilies should be planted deep enough for the stem-roots to develop and take hold. All other lilies should not be deeper than the height of the bulb itself. In other words, if a bulb measures 4 inches from the root-plate to the top, then it is a safe bet to cover it with 4 inches of soil. This rule also holds good for most stem-rooting lilies.

Far more important than the exact depth of planting, however, is the selection of the right location and the right soil. Lilies need an airy, well ventilated, cool location with lots of sunshine. Furthermore, they need drainage and a porous, well aerated soil with an ample supply of moisture. Obviously, these conditions can be best met by planting the bulbs on a hillside or slope with a southern exposure. Remember, also, to plant the bulbs straight up, as otherwise the heavy stems will topple over during the flowering season.

Continue to study your own lilies and, as well, observe those in other gardens. If, on the one hand, we continue to improve our treatment of the lily in the garden and, on the other hand, better lilies continue to become available, then the end result of both trends will be still finer lilies and still prettier gardens.

